DOCUMENT RESUME

ED 080 762 VT 021 174

TITLE	Institute for Superintendents, Planning and Implementing Programs in Vocational Education.
INSTITUTION	Georgia Univ., Athens. Coll. of Education.
SPONS AGENCY	Georgia State Dept. of Education, Atlanta.
PUB DATE	71
NOTE	81p.; Proceedings of Institute for Superintendents (Athens, GA., June 21-23, 1971)
AVAILABLE FROM	Educational Planning & Development Studies, G-10 Aderhold Hall, College of Education, The University of Georgia, Athens, GA 30601 ($3.00)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Career Education; Developmental Programs; Educational Accountability; Elementary Grades; *Institutes (Training Programs); Occupational Clusters; Program Descriptions; *Program Improvement; Program Planning; *School Superintendents; Secondary Grades; *Superintendent Role; *Vocational Education

ABSTRACT

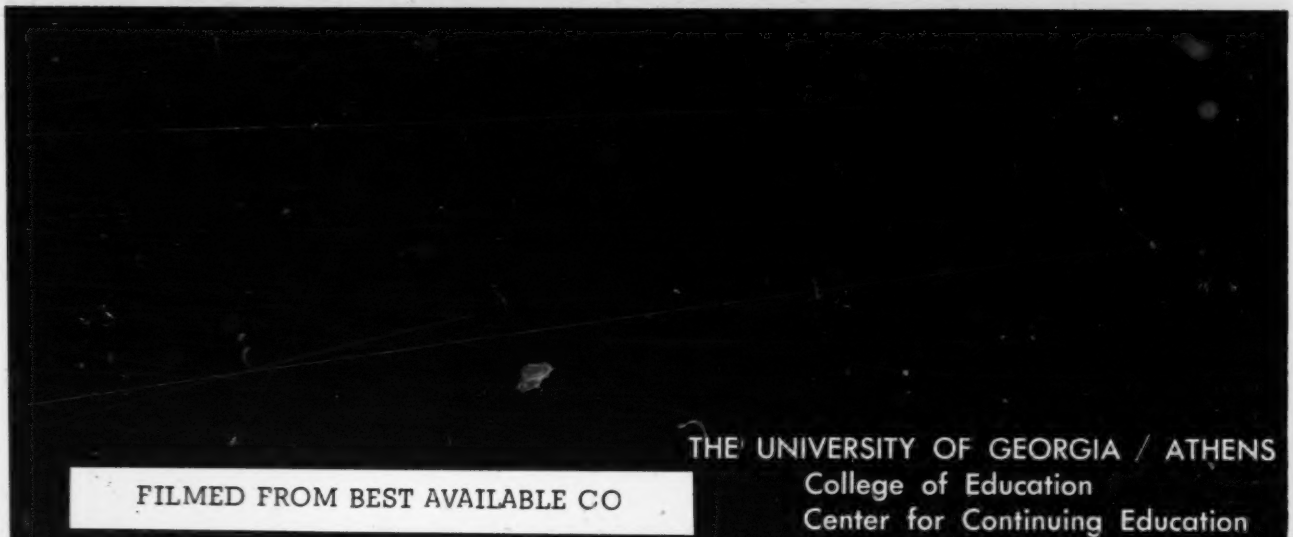
A 3-day institute was held to assist 30 school superintendents in acquiring information and an understanding essential for planning, implementing, and administering more adequate vocational education programs in their schools. Major presentations were: (1) "The Role and Responsibility of the Superintendent for Vocational Education" by J.W. Letson, (2) "The Essential Elements of a Developmental Program of Occupational Education" by G. Bottoms, (3) "Emerging Trends in Vocational Education: Programs and Finance" by G. O'Kelley, (4) "The Emerging Needs for Occupational Education in Georgia" by C. McDaniel, (5) "Innovations in Occupational Education" by J. Nix, (6) "Accountability: The State of the Art in Occupational Education" by R. Luckie, (7) "Occupational Education in Cobb County" by A.C. Crews, and (8) "A Comprehensive High School Program" by R.T. Guillebeau. In addition to the individual speeches, a symposium concerning several vocational and career education programs and the cluster concept was presented by P. Rutland, J. Pevey, N. Frantz, D. Kingsley, and J. Smith. Responses to an evaluation of the institute are included. (SB)

ED 080762

ISTITUTE FOR SUPERINTENDENTS

LANNING AND IMPLEMENTING
ROGRAMS IN VOCATIONAL EDUCATION

UT 021 174



FILMED FROM BEST AVAILABLE CO

THE UNIVERSITY OF GEORGIA / ATHENS
College of Education
Center for Continuing Education

INSTITUTE FOR SUPERINTENDENTS

PLANNING AND IMPLEMENTING PROGRAMS IN VOCATIONAL EDUCATION

ED 080762

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Proceedings

INSTITUTE FOR SUPERINTENDENTS

PLANNING AND IMPLEMENTING PROGRAMS IN VOCATIONAL EDUCATION

Director of the Institute - C. W. McGuffey

Assistant Director - Almont E. Lindsey

The University of Georgia
College of Education

June 21 - 23, 1971

Held at

Georgia Center for Continuing Education
Athens, Georgia

This Institute was conducted pursuant to a grant from the Georgia State Department of Education.

FOREWORD

The purpose of this Institute was to bring together prominent people in administration and vocational education to assist school superintendents in acquiring information and an understanding essential for planning, implementing, and administering more adequate vocational education programs in their school districts.

The materials included in this report are the lectures and presentations made by staff members and visiting lecturers for the Institute. These materials are reproduced for the purpose of giving a wider distribution to concepts and ideas regarding the need for vocational education. The Institute was held June 21-23, 1971, at the Center for Continuing Education in Athens, Georgia. Three days of work and study involved thirty superintendents in a consideration of ways and means of successfully implementing vocational education as an integral part of the total school program.

The objectives of the Institute included the following:

1. To provide the opportunity for superintendents of schools to become more familiar with new directions in vocational education and to understand their leadership role in the implementation of priorities outlined in the State Plan for Vocational Education.
2. To discuss the current state of the art regarding the essential elements and the content of a sequential, developmental program of vocational education.
3. To present the current status of accountability in programs of vocational education.
4. To discuss the various strategies for the implementation and management of programs for vocational education.
5. To familiarize superintendents with exemplary ongoing programs in vocational education.

Many persons provided assistance in the development and management of the Institute. The lecturers and consultants who made presentations are listed following the title of the topic which they presented. Their services in assisting with the Institute are deeply appreciated. Others assisted materially in the management of the Institute program. We gratefully acknowledge the help of Mr. Almont Lindsey, Graduate Research Assistant, Mr. Paul Kea, Conference Coordinator, Dr. Gene Bottoms, Mr. Ed Word, Mr. Gerald Klein, Mr. Don Hogan, Mr. Earl Williams, Mr. Marion Scott, Mr. Paul Scott, Mr. Milton Adams, Mr. Lamar Branch, Mr. Jerry Scott, and Mr. Don Cagill. Acknowledgement of the assistance of the Advisory Committee is given also. The Advisory Committee membership for the Institute included Dr. Charles McDaniel, Dr. George O'Kelley, Mr. Gerald Klein, Mr. Don Hight, and Dr. C. W. McGuffey. The editorial assistance of Mr. Richard Lane is gratefully acknowledged.

Participants were generous in their evaluation of the Institute program. Most persons completing the evaluation instrument indicated a commitment to take positive action toward the improvement of vocational education in their school systems. If this takes place, then one of the basic purposes of the Institute will have been accomplished. We are grateful for the interest and enthusiasm of the Institute participants.

C. W. McGuffey
Institute Director

C O N T E N T S

FOREWORD
Dr. C. W. McGuffey v

THE ROLE AND RESPONSIBILITY OF THE SUPERINTENDENT FOR VOCATIONAL EDUCATION
Dr. John W. Letson 1

THE ESSENTIAL ELEMENTS OF A DEVELOPMENTAL PROGRAM OF OCCUPATIONAL EDUCATION
Dr. Gene Bottoms 8

EMERGING TRENDS IN VOCATIONAL EDUCATION: PROGRAMS AND FINANCE
Dr. George O'Kelley. 19

THE EMERGING NEEDS FOR OCCUPATIONAL EDUCATION IN GEORGIA
Dr. Charles McDaniel 29

SYMPOSIUM:

CVAE PROGRAM
Mrs. Pat Rutland 35

PECE PROGRAM
Mr. Jerry Pevey. 38

INTERDISCIPLINARY PROGRAMS
Dr. Nevin Frantz 41

THE CLUSTER CONCEPT
Mr. Curtis Kingsley. 47

K - 6 PROGRAM
Mr. Joel Smith 50

INNOVATIONS IN OCCUPATIONAL EDUCATION
Dr. Jack Nix 55

ACCOUNTABILITY: THE STATE OF THE ART IN OCCUPATIONAL EDUCATION
Dr. Ron Luckie 64

OCCUPATIONAL EDUCATION IN COBB COUNTY
Dr. Alton C. Crews 70

A COMPREHENSIVE HIGH SCHOOL PROGRAM
Mr. R. T. Guillebeau 77

INSTITUTE EVALUATION. 81

THE ROLE AND RESPONSIBILITY OF THE SUPERINTENDENT FOR VOCATIONAL EDUCATION

Dr. John W. Letson

Superintendent, Atlanta Public Schools
Atlanta

It is a privilege to participate in this program and have an opportunity to talk with fellow superintendents about items of mutual concern. I wish to begin my remarks with a story about Bobby Dodd. I suppose I should not tell a Georgia Tech story at a conference at the University of Georgia, but maybe I can get by with it. I have an idea that some of you may appreciate the approach. Anyway, Coach Dodd sent a quarterback into a football game with specific instructions not to attempt to forward pass if within a certain distance of the goal line. The quarterback either forgot his instructions or deliberately disobeyed them. As you might imagine, the pass was intercepted; the opposing player was in the open, on his way for a touchdown. The quarterback who threw the pass, in a very unusual maneuver, overtook the man, tackled him, and prevented the touchdown. Someone asked Coach Dodd the next day how it was possible for a man who, according to the record, could not run that fast to catch the man and prevent the touchdown. Coach Dodd said, "Well, it's a simple case of motivation, the man who intercepted the pass was merely running for a touchdown, but that quarterback was running for his life."

This story is probably relevant for all of us in education because today more than at any other time in history we should be running for our lives, running toward the objective of better education for all the pupils we teach. There are no simple answers as to how best to accomplish this goal. The school superintendent, beleaguered though he is, occupies a key position in achieving this urgent purpose.

There are many educational accomplishments that we can point to with pride. In fact, education is probably doing a better job today than ever before in history. I am sure that the record substantiates this claim. Our pride in these accomplishments, however, must be tempered by the realization that public education is still not living up to its original promise--an adequate education for all the children of all the people. The record establishes this point, too. Education is not doing a good job for a considerable percentage of the pupils enrolled. We do not have all the answers as to why this condition exists, but we do have some leads.

Traditionally, education has operated as a hurdle race. We set hurdles progressively higher as pupils progress through school. Increasingly pupils found it difficult to clear them. Each educational level led normally and naturally to the next higher level. The elementary pupil prepared for high school, and the high school pupil prepared for college. This has been our traditional system--and it has worked well for approximately half of our pupils. The other half, however, have not fared so well; they have not made the transition from high school to college. In fact, about half of our students do not continue in the hurdle race through high school. About half of those who do do not go to college, and about half who make the transition to

college do not graduate. So really we are talking about a considerable number of pupils who do not successfully move through the educational pattern.

The time has come again to ask "Why?" During the years when this educational structure was developing we lived in a calmer, quieter world. The pupils who did not clear the hurdle pulled out of the race, but there was a place for them. Our economy then reflected a relatively simple agricultural operation. Muscle rather than machines accomplished most of the world's work, so there was a place for those who pulled out of the race. As things became more complicated, however, few places were left for the uneducated and unskilled. This is where we find ourselves today; a considerable number of pupils leave school poorly prepared to find a place in the complex world in which they live.

We know that a large number of dropouts are on welfare. We also know that many jobs go unfilled because too few trained applicants are available. Education has an essential role to play in helping each individual find his place as a productive citizen. We are not now fully accomplishing this goal, and if we are to do so the superintendent will be called upon to provide the necessary leadership.

The story about the football game involved motivation. One of education's unsolved problems is related, because a great need is to discover how to motivate all pupils to achieve in proportion to capacity. Elementary and secondary teachers do not have the same degree of independence that some teachers in higher education demonstrate. College level teachers often say, "Here it is; make a passing grade or suffer the consequences." Some teachers who have been through this process attempt to implement the same philosophy in elementary and secondary classrooms, but it does not work. Motivation calls for new approaches to effective instruction, which in most school systems is dependent upon the leadership of the superintendent.

In our search for solutions it is obvious that more of the same will not solve current educational problems. Business as usual is not enough. A high degree of creativity is an urgent need if we are to assure educational success for a larger percentage of pupils. We can no longer accept as final the fact that a pupil is not interested and will not try. The fact remains that society as we now know it cannot continue to exist if half of the pupils enrolled in school do not succeed. We are face-to-face with an insistent public demand that the schools do a better job of educating all of the children of all of the people. As you know, there are many experiments under way aimed at finding a mechanism for assuring higher achievement for more students. Private contractors are assuming educational assignments on a guaranteed pupil success basis. I certainly am not convinced that the ultimate answer lies in private contracting, but the approach does illustrate the insistent public demand that we find a way to do a better educational job. The basic question is whether or not public education will be able to demonstrate the creativity required to achieve a better result. I am convinced that a part of the creativity we seek is related to finding a different orientation for education. Why is it that pupils are not interested in learning? Basically, it is because many do not respond to an academic approach to instruction. There is a growing interest in organizing educational experiences around a career interest, hopefully achieving a higher degree of motivation for more pupils.

It will be unfortunate if this approach is misinterpreted to mean that everyone will be expected to enroll in vocational education. What is intended, of course, when Commissioner Marland and others talk about career education is an educational approach that uses a career interest as a focus

around which to organize educational experiences and activities. There is nothing sacred about the various disciplines--math, English, foreign language, social studies, science, etc. We have permitted these disciplines to develop with a separateness that assumes that each has some therapeutic value and in the process have often lost sight of the learner and his needs.

By what process do we determine what to teach and how to teach it? What is the role of the superintendent in helping to determine the curriculum? For years we have been giving lip service to the principle of local control and responsibility for establishing the curriculum. Still, the curriculum in most of our schools is determined by what is contained within the covers of an adopted textbook. The responsibility for going beyond the textbook in determining the curriculum rests, in the final analysis, with the superintendent. It is recognized that the typical superintendent will be busy taking care of budgets, transportation, talking to irate parents, and doing all of those other things that are a part of the superintendent's responsibility. Nevertheless, he must carve out a portion of his time for a consideration of the curriculum--what is being taught and how it is being taught. Otherwise, education will seriously suffer.

This brings us to a consideration of vocational education and its place in the high school curriculum. The state of Georgia has played a leadership role in the area of vocational education since its original inception. The original Smith-Hughes Act was co-sponsored by a Georgian--Hoke Smith. A school in Atlanta is named for him. Incidentally, it is one of our comprehensive high schools, and, I am glad to say, offers opportunities in vocational education. Unfortunately, there has developed over the years a kind of separation between vocational and academic education. To too many superintendents and boards of education, vocational education is that portion of education that can be financed by some special state or federal fund. Vocational education is seldom considered on the same basis as the rest of education. I had a chance to talk to a group in Alabama a few weeks ago, and I commented on the fact that anyone who drives through the state will pass many high school buildings. The main building will be recognized by its obvious design, and usually next to it will be another small building. The little building housed the vocational program--agriculture, home economics, and sometimes T and I. The buildings were illustrative of the kind of separateness that has existed since the beginning of vocational education.

In part vocational education is separate because of the way it is financed. It is also separate in part because too many people, superintendents included, assume that vocational education is that phase of education which is designed for pupils who cannot pass the academic program. If there was ever any justification for that point of view, it is certainly no longer valid. I have enjoyed telling of a boyhood experience when I pulled a Model T out under the apple tree and took it apart piece by piece, put it back together, and it worked. I still am proud of that accomplishment. To say the least it is seldom done today. Modern automobiles are so complicated that it is difficult to find a man in a garage who can take one apart and put it back together so it will still work.

It has been assumed in too many instances and by too many people that vocational education is that kind of education that is for someone else's children. Vocational education did not have the prestige of the academic program. In fact, we still have students who insist on taking a college preparatory program because of its "prestige," even though they have no intention or plans to go to college.

I heard an interesting story that is tending to change this vocational

image. A doctor in Atlanta called in a plumber. He thought the bill he received was exhorbitant, so he called up the plumber and said, "Why, man, you charged me too much. You charged me $50 an hour. I don't charge that much." The plumber answered, "When I was practicing medicine, I didn't either." That could be a true story as it relates to income.

Another interesting story involves a man who was called in to fix a boiler for an apartment house having trouble with its heating. He walked around the boiler, picked out of his tool kit a large sledge hammer, and hit the boiler as hard as he could. It started operating and continued to operate with no more trouble. The apartment owner received a bill for a hundred dollars. He protested; he said he should at least have an itemized statement. When received the itemized statement listed: "Hitting the boiler --$5.00; knowing where to hit the boiler--$95.00." Increasingly, the business of keeping things operating calls for skilled people with ability, knowledge, and education.

Unfortunately it is too often assumed that when a vocational choice is made it automatically channels a person into a set direction for life. This certainly is not true as it relates to the current discussion about career education. The term "career education" includes all pupils and all careers. Also, education in the United States has expanded career opportunities for pupils rather than narrowing the choices.

I know a family of six boys, all of whom attended college and graduated from college. Each of the six paid his college expenses working as a meatcutter, having learned the trade in a cooperative study program in high school. The development of this skill did not interfere in any way with other opportunities. One of the boys became an engineer and one a doctor. Working as meatcutters did not adversely affect their chances of success. In fact, the experience made it possible for them to do a better job in the professions they later chose. Career education involves a search for a better way to motivate pupils to learn. Hopefully, it will provide a handle through which to secure a higher level of academic achievement on the part of more pupils. I join Commissioner Marland in saying that the implementation of an extension program of career education is an urgent need and that vocational education must play an important role in its accomplishment.

Let me use another illustration. We normally assume that physics is a difficult college-preparatory course. In reality, however, physics is as directly related to everyday living as any course that a student could take. Why is it that physics is so often taught in a manner that seriously limits its appeal--taught as an academic course that turns many students off? The academically talented are able to progress and profit from an academic approach, but a large group of additional pupils profit most from a less academic presentation. We have been giving lip service to the goal of individualized instruction for many years yet the record indicates that we still have a long way to go before individualization is truly achieved. Most teachers and other school personnel can give the correct academic answer about individualized instruction, but a visit to the classrooms of these same teachers discloses little evidence that the academic beliefs are being implemented. Vocational education has done a good job of discovering ways and means of individualizing instruction, yet even vocational education is in danger of moving away from the techniques that have worked well over the years.

How do we individualize instruction? Let me use another illustration. Tenth-grade English in Georgia, as in most other states, includes the study of a Shakespearean play. Most people know that the study of a Shakespearean

play is a part of tenth-grade English because of personal experience. Also in common with other systems, we have a few tenth-grade pupils in Atlanta who read on a fourth-grade level. In a recent curricular study we found that we were attempting to teach a Shakespearean play to a tenth grader reading on a fourth-grade level. I am sure that we have no monopoly on this situation. I would be willing to bet my bottom dollar that the same thing is happening in your school system. Why? Why are we attempting to teach a Shakespearean play to pupils who cannot read above a fourth-grade level? It is really a waste of time. If we really mean what we have been saying about the individualization of instruction we would be trying to teach these pupils how to read.

We have permitted the school curriculum to become a highly structured program with rigid rules about hours, credits, etc. The schools must be accredited and must have academic respectability, so we follow the rules and impose a requirement regardless of need. Again I ask--why? We are now face to face with the urgent need to change the approach. What is the superintendent's role in this process? Obviously it is one of leadership. Investigation shows that most changes in school programs and operation are initiated by the superintendent--certainly, the superintendent and his staff. I am not suggesting that things happen because the superintendent sits in his office and sends out orders. A superintendent's order might indicate that beginning next Monday morning the educational program in this school system will be based on the individual needs of pupils, but it is doubtful that many changes will result.

Why have we been so slow in utilizing career orientation in order to achieve a higher degree of pupil motivation? Many pupils do not respond to the academic approach we have been using. Certain students will learn in spite of anything that the school does, but others will respond only through the skillful use of motivation techniques. What I am pleading for is a new orientation for education--an orientation that no longer attempts to teach academic skills in isolation but relates them to a program that has greater meaning for all the pupils. I have seen pupils who could not read learn to do so because of a desire to read a service manual which would help them repair a jalopy. This is a kind of motivation that is a natural part of vocational education, but is too seldom utilized. We need to capitalize on its full potential.

As a rule the academic approach has been emphasized on the assumption that there are two kinds of education--vocational and academic. The time has come to eliminate the idea of two separate kinds of education.

Another illustration might be appropriate. If the registration at a given high school indicates the need for ten more English classes or ten more math classes than had been anticipated, somehow or other we work out a plan to get these additional classes scheduled. On the other hand, if the registration indicates the need for ten more vocational classes it is likely that the pupils who are unaccommodated are placed on a waiting list. Several years ago area superintendents in Atlanta were urged to increase the number of work-study cooperative programs available to Atlanta pupils. The first reaction was to point out that it could not be done without extra teachers. That seems to be a state of mind which exists throughout the country. "It cannot be done without extra teachers." In this instance we made a calculation based on the assumption that every student in a high school was enrolled in a cooperative work-study program. We found that on this basis we had more teachers in the high school than were needed.

It costs no more to teach some vocational courses than it does to teach

academic courses, although the opposite is true in some cases. There is an urgent need to redesign the financial plan to provide for reimbursement of the extra costs of vocational courses if and when such extra costs apply. This change would make it possible for local systems to establish courses on the basis of need rather than cost. That is another topic that cannot be exhausted here other than to say that the way vocational education is financed contributes to its separateness. We assume too often that vocational education can only be financed with special state or federal funds while the rest of education can be financed with local dollars.

A large part of vocational education costs no more than other kinds of education, so why do we not schedule vocational courses in terms of student needs? At least a part of the answer lies in decisions superintendents will help make.

The time has come when the public secondary schools in Georgia and other states will be charged with the responsibility of making sure that every pupil is prepared for and satisfactorily makes his next step. This was Dr. Grant Venn's main thesis, and I accepted it and I believed it. The curriculum will change if the school assumes some responsibility for what happens to all pupils after they leave. When a pupil drops out before graduation, teachers and others often say, "Thank goodness, that one will not be back any more. We'll have a better school now that he is gone." That may be true, but the school still has a responsibility to help the pupil make his next step--either to a job, to a vocational-technical school for additional study, or to college. When schools assume the responsibility for placing every student in one or the other of these three categories, we will have a greater emphasis upon changing the curriculum and upon adapting programs to the needs of students.

There are many ways that these changes can be accomplished, but one thing is certain: they will not be accomplished if we assume that "business as usual" is the order of the day. It is, of course, a lot easier to leave things as they are. There is no place more comfortable than a rut. Its dimensions and other characteristics are well known and to get out of a rut means plowing new ground. The role of the superintendent is to put into effect those changes that are necessary to achieve a better educational result. What are they?

Individualized instruction--make sure that students are studying the things that best fit their needs. If this is done effectively, the place of vocational education will be considerably advanced.

Accept the responsibility for helping every pupil successfully make his next transitional step. If this is done, the place of vocational, career, and technical education will be still further advanced.

Eliminate the state of mind which assumes the existence of two kinds of education. There is only one kind--education that will best serve the interests of the students we teach. Let us utilize vocational and career education as the mechanism through which we achieve a higher degree of interest in the attainment of educational goals. Let us recognize that work experience is an essential part of education, emphasize it, and make it possible for a larger number of pupils to participate in work opportunities as a part of their high school program.

I heard Dr. George Counts comment on work experience recently. He said one of the things this modern generation is suffering from is a lack of the discipline of the milk cow. Somebody asked him to explain. He said, "Well, if a young person had the responsibility of milking a cow, he didn't come in some morning and say, 'Well, I think I will wait until next Monday to milk

old Bessie; it's too hot or too cold or too rainy or too something.' A milk cow was a demanding responsibility, but many young people growing up today do not have that kind of experience." Work experience not only teaches the skills involved but also makes it possible for an individual to learn some of the things that are essential for acceptable performance on any job.

An individual who does not enjoy the rewards which come from being able to do something with his hands misses many of life's pleasures. After I started using a wood lathe I realized that I had gone through much of my life looking at things and not seeing them. Since I started using a lathe, I never pass a turned item, whether it be a lamp or column or whatever, without really seeing it.

Really, what we are talking about is the quality of life, not only for the pupil who is directly concerned but for everybody. If you go to a restaurant and the waiter does his job with skill, and the chef has done his job with finesse, and the decorator has done his job correctly, if everything is just right, the quality of life for everybody in relation to that experience is improved.

The topic assigned encompasses an opportunity for all of us in public education to have a real impact on the quality of life in the years ahead. The dignity of work and the satisfaction that comes to the individual who takes pride in the quality of his accomplishments are essential parts of the effort to organize education around a career emphasis. The attitude of "I don't care, and so what if I don't do my job well" does not contribute to the strength of the nation and is increasingly out of character as we review those things which contribute to the quality of living generally.

As superintendents let us delay no longer the development of a kind of educational program which recognizes aptitudes, interests, and capabilities of pupils and helps each one undertake those activities best designed to meet his needs irrespective of the artificial standards imposed by so-called academic prestige. A career emphasis and career education for all will help accomplish this goal.

THE ESSENTIAL ELEMENTS OF A DEVELOPMENTAL PROGRAM OF OCCUPATIONAL EDUCATION

Dr. Gene Bottoms

Associate State Director, Division of Vocational Education
Leadership Services, State Department of Education
Atlanta

There are about five things I want to try to do in this paper, and all of my objectives relate to the term "career education." Throughout this paper you will see "occupational education," and part--but not all--of it may be vocational education. Let me explain the differences right away if I can. What we are really talking about when we talk about career education is something broader than traditional vocational education, which by law was limited to job-skill preparation. Career education, as defined in the 1968 Vocational Education Amendments, broadens the concept of vocational education to include exploratory activities and other related kinds of activities which I am going to talk with you about. So I want my presentation (1) to define career education as broader than job-skill preparation. I also want (2) to state the reasons for career education and some of its advantages, (3) to describe a career education program being developed in some parts of the state and the kind of program that we are attempting to build, (4) to recall some of the resources for assisting local systems in implementing various parts of a career education program, and then last (5) to state how the concrete career experiences at various levels of education can be integrated with academic education or general education or the basic educational skills that an individual has to have in order to function in our society.

These are my five objectives, what I am going to try to accomplish. I think you may have some questions, but I will try to identify some of the questions and attempt to answer them as I go through the presentation.

Career education, vocational education, occupational education, or whatever you want to call it, can provide educational experiences that are meaningful for an increasing number of our students. I was interested in a quote made by a fifth-grade teacher who was participating in a career education project. She stated: "A career education program serves as an enrichment program for the advanced student, stimulates new interest in the subject matter for the average student, and provides enjoyment and a greater desire to achieve for the slow learner."

When you look at the outcomes of education in our state, it is not difficult to see the need for career education. Let us consider three or four facts. I do not know whether we lose 50 per cent of our students in grades one through twelve, or whether it is 40 or 35, but regardless of how many it is, it is too many.

Secondly, in this country, the unemployment rate for black youth is right at 50 per cent, the unemployment rate for all youth being about 28 per cent. That should tell us something about a group of youth in our society who are having difficulty in moving from school into the world of work. We have in our state (and these are facts substantiated by the last census) over one million people who live in families that make less than $4,000 per year.

I do not know whether you have thought recently about trying to live on $4,000 a year or not, but it is pretty difficult. And one common denominator these people have is that they simply do not have a proper education; they lack job skills.

In May there was an article in Time magazine which reported that a large number of college graduates were not being employed because jobs were not available. What really disturbed me, however, was the attitude of many college graduates who said that they would just roam around the country for a couple of years before even seeking employment.

We may have a time in the future when many people will not work for a living, but as yet we have not come to a time when adults know how to make use of their time without using part of it in working activity. When you look at the subculture developing among our middle class youth, our college oriented youth, and our college graduates, who seem to say "I don't want to work for a living, I am going to move into the inner city, and I am going to separate myself from the flow of work," you have to begin to ask what has caused this. These are not the poor kids that you find in Atlanta in hippie areas. These kids are, for the most part, pretty well-educated. So I think we have to ask some questions here about the need for career education.

These three or four facts seem to me to indicate a need. It is not that schools in this state have not drastically improved over the past twenty years. There is no comparison between secondary schools now and twenty years ago; a tremendous improvement has come about. We have new math, new English, new science curriculums, most of which were designed to make people think like scientists and mathematicians. But most people are not going to be those things. We have drastically improved the quality of education if a young person plans to pursue higher education. But it seems to me that with the vast improvement in education in this state, changes have not come fast enough to take into consideration the change in the economic structure of our society and the kinds of skills that people must have to move into jobs that will provide a decent living. So what we are talking about is bridging the gaps that exist between students' school experiences and the real world in which they must live, because many of them lack the competence necessary to develop and manage their own lives.

What is career education? It is broader than what vocational education has been in the past. It is different things to different people. Most traditional vocational educators state that it is a new word for vocational education. The general educator will say that it is something that does not include job skills (and that is what Marlin recently said in a speech), that instead it is career orientation: it is teaching traditional subject matter within a career context. A counselor will say it is a career day, an occupational library, or training on how to apply for a job. Industrial arts teachers will say it is what they have always been doing. The career development theorist says it is the body of objectives and content that must be organized into the curriculum. To some, career development allows students to have simulated or hands-on experiences in actual work settings. To others it is an interdisciplinary curriculum which organizes and integrates career-oriented experiences and the basic academic skills. I think career education is all these things and much more. I would define it as a new step for education that places as much emphasis on education for earning a living as we currently place on education for living. I contend that about half of the people in our society can do very little living unless they can earn a living; and it is time we gave equal focus to that aspect of man's life. I do not know why most people pursue undergraduate degrees and masters degrees

or even higher advanced degrees, but one of the major drives behind my degrees was simply to be able to earn a better living.

The point that I am trying to make is that career education is not just helping a particular individual make specific decisions to enter a vocational program, nor is it just teaching decision-making skills; rather, what we are trying to do is to provide an individual with the kind of education that helps him enter the world of work and helps him make those kinds of decisions that make it possible to continue to progress in the world of work.

I would like to look very briefly at some advantages of career education to the student. By career education I really mean building a theme into the program from kindergarten through grade twelve in which students see a relationship between their educational experiences and their role as a worker at some future point in our society.

One of the advantages of career education is that it can provide many students with a reason for learning. Let me illustrate this point with a couple of examples. Recently an eleventh-grade student (enrolled in an interdisciplinary education program in which math, science, and English were being correlated with an electronics laboratory) made a remark to me. He explained that his attitudes and grades had changed because the new program enabled him to see why he should acquire essential academic skills of math, science, and communication.

A disadvantaged student enrolled in one of the Coordinated Vocational and Academic Education Programs (CVAE) in this state said he could now see how his studies were preparing him for the future, rather than forcing him to mark time in unnecessary courses that were preparing him for nothing. So letting students acquire math and science skills in a context of career activities helps them to see a reason for learning these competencies.

Second, career education causes students to begin thinking about their futures. If it is not natural for a junior high school student to want to think about what he is going to be when he is an adult, it is not natural for him to want to learn math, either. For a long time we said that youngsters at the junior high level were too young to think about careers, but one day I looked at the figures in this state and discovered that about two-thirds of our dropouts occur at the ninth and tenth grades. Now they may have been too young to make choices, but they were making choices, and that choice was to leave school.

Third, through a career education program students can gain a greater respect for themselves and for others. One third-grade teacher noted that a student who had never been able to achieve very well in school became known as the person in the classroom who turned out to be the best hammerer and sawer in the school. She stated that as a result of a construction project this student's attitude toward school and the attitudes of other students toward him changed. Oftentimes we limit the kinds of learning activities we have in school to those that deal only with the book, and for that very reason we are denying many students an opportunity to achieve.

I think career education has some advantages for teachers also. Many teachers have been asked by students, "Why should I pursue math, why do I have to take English, why do I have to learn English grammar?" One first-grade teacher pointed out that in a career development project in her classroom the students built and operated a post office within the classroom. Before students could sort the mail and deliver it to the other classrooms, they had to learn to recognize numbers. She points out that this motivated every student in that classroom to learn to recognize numbers so they could work in this particular post office.

Over the years on carrying secondary teachers on tours through post-secondary technical schools, I have been amazed at the expressions on their faces when they go through an electronics lab, for instance, and see a student (who failed math in high school) explaining algebraic equations. Here was a youngster who could see a relationship between math and earning a living and performing a particular work task. So math, science, and communication skills are tools that man uses in earning a living, and through career education programs students can begin to see how these skills and concepts can be education for something rather than education for nothing. They can see how they relate to the world of work.

A career education program motivates students. Next year we will have about four thousand students enrolled in the CVAE program across the state, and these are all potential dropouts. We have not been successful with all of them, but the fact that has impressed me is that, when we enroll them for the first year, the absentee rate for these students goes down 50 per cent, the letter grade achievement goes up one full letter grade, and the number that state that they plan to finish high school increases substantially. For the first time many of these students can see a reason for learning; they can see a relationship between school and a work role they will eventually fill.

The last advantage of career education seems to me to be that career education offers to the teacher another method of teaching. It makes for learning by doing as opposed to learning vicariously. We know from the work of psychologists and others that, in terms of the mental development of individuals, there are about three stages in mental development. One goes from thinking of things to the ability to use words or symbols to think about things to the point where he can draw generalizations using these symbols. We also know that there are large numbers of students in our public school systems who never develop to the third level of development--or even the second level. It seems to me that career education offers a teacher the opportunity to teach basic math and basic communication skills by a new method in the context of career activities.

Maybe I can illustrate the point. You can teach some students about how to use a ruler through a lecture method, but the best way to teach most students about a ruler is to let them use a ruler. That is the point that I am trying to make. For years most of us memorized the parts of speech, but I still cannot call them off to you. We never do learn how to communicate--speak, write, listen, read. So career education opens up a whole new vista of learning activities for the teacher in teaching basic academic skills. The English teacher who forgets about certain subject matter content for tenth-grade students and begins to tie it to certain career activities to teach kids the four basic ways of communicating will probably be more successful with some students than he would in attempting to teach the traditional English content and approach.

What are the advantages of career education to the school? Let me mention briefly three or four of these. Career education helps to create a school climate in which the staff takes equal interest and pride in assisting each student in shaping his career life. To a large extent right now, the academic teachers are responsible for preparing students to go to college, and the vocational teachers are responsible for preparing students to go to work. All teachers are responsible for preparing all students for their next step. So I think career education will begin to create this kind of emphasis.

Public education could be held accountable for insuring that each indi-

vidual chooses, prepares, enters, and progresses in activities furthering his career life. Career education would make schools have a new reason for being, not only to help the individual make initial entrance into the world of work but also to progress in a career. The school would have a new basis for assessing its success with every student, for learning would be for purposes other than mere academic achievement valued only in the school. I am all for that. It would take on additional meaning--make application of learning in the world of work. It would become a continuing education center for adults; the school would be forced to keep abreast of technological and economic changes taking place in the world of work. It seems to me that career education would begin to build the same bridges between school and business and industry that we have built between the public schools and higher education over the past hundred years in this country.

What are some of the basic principles of a career education program?

1) Career education must be sequentially organized from kindergarten through post-secondary and adult education. For a long time we operated as though a student wakes up at the end of the ninth grade and decides what he wants to be for the rest of his life. How many of you are in the occupation you said you wanted to be in at the end of the ninth grade? How many of you said you wanted to be a school superintendent at the end of the ninth grade? Career development is a continuous process, and you are still in the process of career development. One just does not decide one morning what he is going to be, and yet we design vocational programs and school curriculums as if that were the case. What we are trying to say is that a career education curriculum should help a student even in the elementary school begin to formulate a concept of himself that says, "Someday I will be a worker." This concept should gradually refine itself as he moves on through school.

2) Career education must be organized as an integrated structure within the educational program. It should not be regarded as an add-on course or unit involving only selected teachers. For many students a career education theme can provide a nucleus for making the more general academic aspect of the curriculum more meaningful for many students. I know that we in vocational education have contributed to vocational education's being organized as a separate part of the school. I think this is a point: if we are to have something that is called career education it must be a part of the school, not something separate and set aside.

3) To meet the needs of all students, career education must be flexible enough to allow each student at each educational level to make choices from the broadest base of knowledge, to have access to a cross-section of career curriculum experiences, and to have freedom to move from one curriculum to another. If he selects a construction program at the secondary level and after a half year decides that it is not the program for him, there ought to be enough flexibility for him to move into another curriculum area. Career education cannot become something designed to recruit kids into vocational education at the lower grades. It must be designed to educate all students.

4) Career education is student-centered rather than manpower-centered. If we are not careful, we could operate a career education program as a sort of mining operation in which we are strictly concerned with the collection of certain talents for particular manpower needs, rather than as a farming approach in which we attempt to develop all students. Much of the national legislation through the 1960s was based on a mining approach where we did identify those who had outstanding talents to move into certain kinds of fields.

5) Career education programs must consider the individual's readiness level for career education. Just as in any other form of education, some students are more mature, more able to manage a vocational choice at grade nine, than are other students; and we have to consider this point.

6) Career education includes job-skill preparation.

Twenty of thirty years ago we had in most of the schools in this state, or at least in many of them where some of you were enrolled, the old occupations course in which at junior high school or early high school we attempted to set students down in a classroom and tell them about the world of work in Atlanta or some other place. Career education, if it is to be successful in helping the student begin to see himself as a worker and learn about the world of work, must provide some experiences in which the student can observe the work directly, can use the tools of workers, can use the materials, can use the processes. He must have some hands-on experiences, some experiences on which to tie these things. I am convinced that you cannot just tell a kid what it is like to be a machinist if he has never known a machinist. If he has never been inside an industrial plant, he has no base of experience to know what you are talking about. So the old idea that we will get some occupational briefs and hire a teacher who has never worked at anything but teaching to tell kids about the world of work will not work. It did not work thirty years ago, and we abandoned it.

Career education also includes assisting the student to participate, to enter, to adjust, and to progress on a job. For a student in many Georgia high schools a curriculum is laid out at the beginning of the ninth grade. A student is told that if he plans to go to Tech he has to take certain courses. If he has a good counselor, that counselor is going to arrange for him, at the tenth- or eleventh-grade level, to go to Tech for a visit. If he is lucky, he will meet a representative from Tech who will talk with him. In the eleventh grade, he is going to be told to take a test in order to get into Tech. He is going to be told when to make his application. He is going to be told by every teacher in school that, in order to make a good enough score on the college boards, he must do well in math. Now these are the very brightest kids in our society. I want you to look at how much attention we focus on helping these kids move through the secondary school into college. I contend that it is more difficult to move from rural Georgia into Atlanta and get a job than it is to move from rural Georgia and get into college. The point that I am arguing here is that the school needs to provide the same degree of assistance in moving from school into work.

The last point that I would make as a basic principle of a career education program is that students at all levels must be provided with an opportunity to participate in concrete learning activities that closely approximate the variety of work roles, work settings, and work-life experiences reflecting career life. In other words, they need to have the opportunity for hands-on kinds of activities.

Next I would like to look very briefly at some elements of a career education program that we are attempting to implement in a number of places throughout the state. At the elementary level we will have fourteen elementary schools next year that will be attempting to fuse career-oriented concepts and activities into the existing school curriculum. Teachers will be attempting to fuse three-to-five such activities during a given year's time in major attempts to help these students at the elementary grades to acquire a positive attitude toward work and to provide a vehicle for teaching some of the basic education skills to many students.

At the junior high level about 110 systems next year (110 high schools)

will have a program of educational career exploration. Most of these programs are at the seventh-grade level, and in these programs students are carried into the world of work to look at service occupations, businesses, organizational jobs, outdoor occupations, jobs in technology. They make about fifteen half-day trips into the world of work. This program has worked. I will not go into the research data on it, but we have data that show that students who have gone through this program have significantly greater maturity--that is, the ability to make vocational decisions--than do students who have not gone through it. We know that attendance during the time that students are enrolled in this kind of program increases substantially. We know that grades go up. We know that interest in school increases. We do not know if it causes more students to finish high school. Long-term experience will help us to answer that kind of question.

This program is a nine-week training program for the coordinators of the PECE program, and these people spend two days a week during that training program working in different jobs; and many of these people who have gone into the program are men, and most of them are under thirty. I would imagine the average age is under thirty.

There are a couple of patterns that are being followed. For the most part they are working students on a quarter basis. In the city of Atlanta next year these coordinators and a team of academic teachers will completely relate the school program for the entire day for a full quarter around this effort. They will use team teaching and will integrate the curriculum around these career-oriented experiences.

The overriding purpose of this PECE program is not to force the student to make an occupational choice but to open up for the student all the possibilities that do exist.

We have about thirty schools next year that will be following the PECE program. In fact there are about eighty teachers in summer school right now being trained to do this. They will provide students with an opportunity to select from six to twelve weeks to participate in a pre-vocational program. It is our hope that once a student leaves the PECE program in grade seven he can select four of these areas to explore in greater depth. Some schools have hired additional business teachers to implement this program. Others have redirected agriculture teachers, home economics teachers, industrial arts teachers. Let us say a student is interested in health services: he would spend approximately six to twelve weeks, depending on the pattern of the organization, exploring and actually participating in solving some of the problems and performing some of the activities that people would perform in health occupations.

Let me point out that if a school has three of these areas--three from among the list including clothing and textiles, child care, home and institional management, nutrition, four areas in business, four areas in industrial arts (construction, manufacturing, communication, and transportation) --it can provide students with an opportunity to select twelve broad occupational areas which they can explore in depth for nine weeks. This is a scheduling problem, because what we are advocating is that a student not sign up for any one area for the full year, but that he sign up for a different area each nine weeks. If you take several areas of broad occupations and offer programs with three or four courses within those areas, you are covering the bulk of the occupations in our society. You can help students to try on an occupational area before making a choice. You would not buy a suit unless you tried it on, and this is the kind of thing we are trying to do in this program.

At the ninth-grade level, many schools are following this curriculum with a one-year pre-vocational program. Let me make sure you are getting the pattern. In grade seven a student explores all broad occupational patterns, in grade eight he selects four of these for nine-weeks' exploration, in grade nine he selects one (the one he thinks he is most interested in) for a one-year, in-depth look. Some of the offerings that are being made available throughout the state include health and personal service, public service, food service, home economics-related occupations, office data processing, sales and distribution, transportation, communications, construction, manufacturing, general agriculture.

In grades seven, eight, and nine, the emphasis is on exploration, and a student's trying to figure out what he wants to be. In grades ten, eleven, and twelve, the emphasis shifts to preparing him for what he wants to be, with a secondary emphasis still on exploration. We have developed cluster curriculums in about fifteen or sixteen areas. The student enrolls in these areas at the tenth-, eleventh-, or twelfth-grade levels for two hours a day. At some schools these courses are scheduled as two one-hour courses. There are some students in your school who can learn as much in one hour as it takes another student two hours to learn, so you have a very flexible pattern. Up until the 1968 amendments, most educational programs of this nature in the secondary schools had to be for three-hour blocks, so we have tried to break that down to two-hour blocks, even moving toward the possibility of one-hour blocks.

Also in the tenth through twelfth grades there is still a cooperative educational program. Some schools are just beginning to use cooperative education. For example, if a boy spends two years in a construction cluster, then during his senior year, he could go into a cooperative program and work in a construction occupation and carry something to the employer at that point in time.

Next year we will have at the secondary level about 600 secondary students in grades ten through twelve who are enrolled in post-secondary area schools between the hours of three and five. The school systems have contracted with those post-secondary schools to serve their students between the hours of three and five.

We also have early or advanced placement in post-secondary schools. Next year it is projected that 1100 seniors will be enrolled in area schools on a full-time basis, and procedures are being worked out to provide for advanced placement for students who participate in the secondary vocational program in the post-secondary schools.

Let me summarize by looking at the elements of the career education program. You have heard of orientation programs for a long time. This would be an element of a career education program and it would be designed to assist students to learn about themselves and about the environment. It would be a kind of telling approach, and you can justify this approach because you know that a youngster cannot select an occupation if he does not know anything about it. If he does not know about something he is not free to choose that option. So I would advocate that every subject matter in the school ought to provide some experiences to help the students see the relationship between that subject-matter content and the world of work, and these kinds of activities could be fused into the educational program at all levels.

The second kind of activity would be exploratory in nature--activities to help students at all levels to see whether they really want to go into a particular occupational area. In a chemistry lab, many students who think they are going into a chemistry field are participating in exploratory activ-

ity. We are talking about providing these kinds of experiences for all students at each educational level.

Interdisciplinary education, or the tying together of vocational and academic education, makes a lot of sense to me. We have failed to teach the basic educational skills to a large number of students. If we could look at the curriculum patterns in which we attempt to relate the teaching of academic skills, exploratory, pre-vocational, and vocational skills, I think we could teach the basic educational skills to the group of students whom we have failed. What we are literally trying to do is to allow students to apply abstract concepts to concrete problems of a career-oriented nature. There are several curriculum patterns for doing this. The pattern of a horizontal curriculum in which teams of teachers work together seems to be the most successful pattern.

Another element of a career education program would be a career cluster curriculum at the secondary level. A few schools are doing this. You may not buy this concept, but if a student is enrolled in a middle program (and this could be construction or some other program) in the tenth, eleventh, or twelfth grade for two hours in three quarters for two years and for two hours for three quarters another year, he could, for one quarter, be taught reading skills, listening skills, and writing skills (all English, of course) in the context of his particular career area. I am not talking about the full year; the other two quarters he can continue to pursue Shakespeare, etc. I am talking about one quarter. Why not help him to acquire some basic skills within the context of his career area? Why not teach him a special math course one quarter, those math calculations that he must be able to make in order to be successful in his field, and why not have this math teacher work with the middle teacher? There is an awful lot of science that can be taught in terms of strength and durability of materials. Why not teach those essential science concepts, organize a one-quarter course one year, another one the next year? For the other two quarters he can move into the regular science program. No doubt the quarter approach to curriculum organization would help him to implement this kind of program.

I would even advocate a middle social studies curriculum. What if you look at history, world history, in terms of the development of metal? I think you would find a high degree of correlation between advancing civilization and what we have been able to do with metal. Or if you looked at labor unions, there could be some particular tie-in here. Maybe one quarter of career planning.

I am citing the extreme example, but it seems to me that, for a lot of our students in secondary schools, this kind of curriculum pattern would make sense. They still have the time for other aspects of education and education for living and education for enjoying life. This approach does not tie up even half of a student's time for two years. This you could do for construction, and this you could do for most of those clusters identified earlier. The argument could be that what we are really doing is specializing in everything too much. I am not sure that is really the case. It seems to me that every teacher in the school is communicating with every student with whom he is concerned in terms of what he is going to be. The teachers are taking pride in helping him to be that and are giving the same kind of attention to this youngster that they would give to the youngster who is going to Georgia Tech.

Another element of the career education program is intensive specialized short courses. Despite all you can do, you are going to have some students in the secondary schools and junior high schools who are going to

leave school as soon as they are sixteen; and you ought to have enough freedom to put them somewhere where they can acquire an entry-level job skill in a specialized area. You may have a girl who, all of a sudden in the middle of the senior year of high school, decides that she is not going to college. The curriculum ought to be flexible enough to allow her to enroll for three quarters of typing and leave high school with a job skill. That is what I mean when I talk about short-term specialized short courses.

The out-reach effort, too, (out-reach is simply an attempt to try to return dropouts to the school and to a new kind of curriculum, with central focus on careers) can hopefully return students to school long enough for them to acquire job skills.

Another element of career education is job placement and follow-through. Job-placement is something that we have talked about in education ever since I have been in it. We are talking here about devoting as much attention to helping students get good jobs for which they are trained and to helping them hold the jobs as we are now devoting to helping students get into the right college. I use the word follow-through because there are many students who need help not only in getting a job but also in holding a job. We can say that there is dignity in work, but there are some jobs in which there is little or no dignity; and a guy who thinks he is going to be in one of those jobs for forty years understandably becomes disenchanted with our society. I think we can help some students if we stay with them long enough so that they either get a promotion on the job or an increase in salary. Of course, guidance and counseling, with a focus on career guidance and counseling, would be part of a career education program.

What about funds for this kind of thing? I try to think of some of the things that are going on and how people are using some funds. Much of what I have talked about does not require additional money. It simply requires the decision and the commitment to move on. It requires a retooling as much as anything else.

In the elementary school efforts--career education in the elementary school--we are funding ten developmental projects this year. We are asking the legislature for enough funds to extend that to fifty-four. There are about six systems which have presented proposals in instructional assistance projects at the elementary school as a vehicle for teaching basic academic skills. So there are about six or seven systems that are attempting to use these funds. We have a few systems that are using Title I--ESDA funds to initiate this kind of program. Title III is a possibility, but no one uses Title III at this time.

At the junior high level there are vocational funds for the PECE program, at least to get the program started; and additional extended day and extended year programs are available after the first year. We have the many pre-vocational programs in grade 8, where many systems are just redirecting their existing vocational teachers. We have about three systems that have reassigned their high school counselors to the form of a PECE role. Several of them are in summer school to be retrained to implement that kind of program at the junior high level. We have a couple of superintendents who have decided, rather than hire a new social studies teacher, to hire a person for PECE. Thus, many schools are counting it as social studies. Of course the disadvantaged and handicapped projects that many of you have are being used to help in grades seven through nine.

Then in the senior high program there are vocational funds. We are asking the legislature this year to provide funds for three-plus allotted teachers to secondary schools that have over 1,000 students and to provide two-plus

allotted teachers to schools that have under 1,000 to meet minimum requirements for a comprehensive program. We have had some indication that this might be funded, and if you think that something like this is needed, you can help make that become a reality.

You know about the instruction and equipment fund for high schools. We would accept a brief proposal for a very small grant. We have a system that is putting in a comprehensive high school next year, a year from this coming fall. Funds to help you redesign your curriculum in the ways that we have been talking about today will be provided.

Some of the schools are redirecting some of the general education curriculum content so that there is an emphasis on careers. A number of systems are doing this, building into the general education curriculum, the academic curriculum, certain content and learning activities that are career-oriented.

A few schools are redirecting some of their English and social studies teachers and replacing some of those teachers with teachers in occupational areas. A few systems are using Title I funds.

Redirection and utilization of twelve-month vocational teachers and extended-day vocational teachers could do some of the things that we have talked about today. We also ought to work on ways of using twelve-month vocational teachers a little bit differently in the summer.

In closing, I have tried to point out that education should give as much attention to preparing students for earning a living as it does to preparing them for living, with the argument being that this kind of education will enable us to serve an additional group of students that we usually do not serve very well.

EMERGING TRENDS IN VOCATIONAL EDUCATION: PROGRAMS AND FINANCE

Dr. George O'Kelley

Professor and Chairman, Division of Vocational Education
College of Education
University of Georgia, Athens

I never fail to take advantage of an opportunity to discuss with school people my interest (and theirs) in vocational education; and certainly I would not miss being with this particular group for anything. As I look back over a lifetime in vocational education, one of the things that impresses me as having been out of kilter for a long time is the relationship between those of us who plan and conduct vocational education programs and those of you who are in administrative positions in local school systems. After all, you are the most important people in terms of whether or not vocational education will succeed. I think sometimes we forget that, and so I shall never miss an opportunity to talk with principals and superintendents about vocational education; and certainly if I can convince you people that we in vocational teacher education at the University of Georgia are vitally interested in helping in any way we can, then I shall consider this afternoon well spent.

I do; however, regard this as a difficult assignment because it is a little difficult for me to deal with this topic without lecturing. I hope you will bear with me, because I certainly do not want to bore you with a lot of details, but I think some details will be necessary to trace for you the emerging trends in vocational education as I see them. I hasten to add that I think that the last couple of years have been very fruitful for me in observing what is happening in the country in vocational education and developing some insight into what I think vocational education is going to be in the future. Some of you know that our division has been chosen as one of eleven institutions in the nation for doctoral level training of leadership personnel in vocational education, and in this position I have been invited during the past two years pretty much all over the country to observe, to confer and to consult with vocational educators on the programs being developed. This has given me a lot of insight, insight that has helped me to see some emerging trends. The State Department of Education people have been very good in inviting us to participate with them in the planning and in the actual contracting of these programs in the local setting. I have seen some very stimulating things occurring in this state. As a matter of fact, I hasten to add that I think some of the most interesting things happening in vocational education today are happening right here in Georgia. You do not have to go too far to see some of them.

Vocational education is changing. There is no question about that. It is changing because times are changing. The socioeconomic situation has undergone some drastic changes, and some of the causes that are involved in these changes have affected not just vocational education but all of education.

Another thing that has occurred has been a change in the legislative approach to the support of funding of vocational education at the national level. This has exerted a profound influence on vocational education and is going to make other drastic changes come about in the foreseeable future.

Therefore, it will be necessary for me to review a little bit of the legislative background of vocational education in order to talk to you about some of the trends that are emerging from the situation currently facing us. If you will bear with me for just a moment, I will review briefly some of the legislative developments affecting vocational education.

You know that as far as federal funding is concerned our support for vocational education programs traces back to the Smith-Hughes Act of 1917. Prior to that time we had vocational education programs in many states and in many systems that were supported by local funds, but this was the first federal-level support for any kind of education in the public schools.

The Smith-Hughes Act defined vocational education generally as "the training of workers and prospective workers" in specific occupations; and it named those occupations. One was agriculture, one was trade and industry, and another was home economics. These three areas were identified, and the policies for developing programs within these areas were actually legislated by law in terms of kinds of students, objectives, and, in one section of the legislation, the length of the classes. I guess you would expect that kind of thing in a first attempt. Thus, we began our program in this nation with legislation that specified programs in specific occupations. Beginning at that point, our program was occupationally centered in that practically all of the policies referred to the three occupations named above and also specified what had to be done in terms of them. In vocational agriculture, students were required to have six months of supervised farming practice; and the legislation used the terms "preparing farmers," which set the stage so that even today we say that this program is a program designed to train farmers--whereas agriculture is a much, much bigger industry than farming. Another was to specify that the work had to be done with students fourteen years or age or older.

The T & I program specified the length of the period; and the specifications that were set up for the length of the period and the qualifications of the teachers resulted in its becoming almost entirely an out-of-school program. The home economics program specified the objective of preparing girls for work of the home, with no reference at all to other occupations related to homemaking.

Then, to compound the situation further, the funds were allocated in terms of these specific programs--so many dollars for agriculture, so many dollars for trade and industry, so many dollars for homemaking. This meant that states and local school systems had very little choice or opportunity to decide what kinds of programs they wanted or needed. Their only decision was whether or not they wanted this kind of program. "If we want it, then we take the money."

The result of that kind of legislation has been that vocational agriculture has developed strongly in rural schools, hardly at all in your urban schools, altnough the industry of agriculture may be centered in many of the larger towns. Please note that the skills in agriculture in those particular industries are sometimes the same skills the boys used in their farming operations or in those operations that were on their farm several years ago.

The same restrictions meant that T & I developed mainly in urban schools. Agriculture was in rural schools; T & I was in urban schools. Yet the movement of the rural population into the city meant that boys would grow up in one environment and move into another for which they were obviously not well trained. It also meant that the T & I program, because of its restrictions, was an out-of-school, adult program and that the homemaking program was one largely in the art of homemaking--with no reference whatever to the occupations related to homemaking.

The next legislation, the George-Read Act of 1929, began with the words "to extend and support the Smith-Hughes Act," which meant that the same kind of programs were supported, and money was allocated on the same basis. Again, in 1934, during the depression, when additional funds were needed, the George-Elsey Act contained the same words "to extend and to support." The George-Deen Act of 1936 again had the same kind of terminology. During all this period of time we were continuing an occupationally-centered program by legislative edict.

The 1936 bill did add one other program--distributive education--to the list of three. Since that time, we have had that program in our schools. The George-Barden Act of 1946 continued the same wording but, although it put rather strong emphasis on industrial education, it did not specifically allocate the funds in that direction. As a result the same kind of funding arrangement was continued.

It was not until the Vocational Education Act of 1963 that the approach to the funding of vocational education was changed. There is a little bit of background information in this one that you might appreciate, and some of you may not know this. President Kennedy, in his campaign for the presidency, noted some of the problems of unemployment and underemployment in the nation, and he promised that he would do something about this if he were elected. Upon election he appointed a panel of consultants and charged them with the responsibility of recommending to the government what was needed in the way of a program of vocational education. This committee came up with a recommendation which, in addition to adding business education as one of the reimbursable programs, raised a question about the inconsistency of the emphasis on specified occupations in terms of training all people for the kinds of work for which they were suited and which was needed in the locality for the economic development of that area. So it was not until 1963, then, that we began to change from the approach that had begun in 1917--the occupationally-centered programs of vocational education.

Another thing that came out of that 1963 legislation was the establishment of an advisory council at the national level. One requirement was that at the end of five years an evaluation of the program would have to be made and recommendations for a continuation or discontinuation of the arrangement would be sent to Congress based on this evaluation. That evaluation was made, and the 1968 Vocational Education Amendments were written into law.

I want to talk a little bit about those. You will notice that these are identified as the 1968 Vocational Education Amendments--it was not a new act --and that the legislation amended not only the vocational education program but also the EPDA program which had been developed in connection with the Elementary and Secondary Education Act of 1965. The legislation rescinded all previous vocational education legislation except the Smith-Hughes Act, which means that today all programs in vocational education now operate according to the 1968 amendments. The reason for the retention of the Smith-Hughes Act was that that legislation included the authority to appropriate, and so that legislation carries a continuing appropriation that will go on and on. Today's legislation contains authorization to appropriate, and of course the Bureau of the Budget has to recommend that appropriation annually. The Smith-Hughes Act is still active; but the 1968 amendments stipulate that this money also has to be used according to the provisions of the 1968 amendments. So, for all intents and purposes, vocational education programs are operating entirely and exclusively under the 1968 amendments.

This appropriated much more money than vocational education had ever had in the past. If Congress and the Bureau ever sees fit to appropriate

all that is authorized, it will be more than nine-hundred-million dollars. I do not know how soon they will get to that level, but this is a major step forward. I heard the chairman of the House Sub-committee on Education say that his committee thought that it would take at least five-billion dollars to finance the kind of vocational education program that this country needs and that he and the other members of the committee would never be content until it was fully authorized, because they considered this one of the major problems holding back the advancement of the country under present circumstances.

I will not go into the details of these amendments, but the one thing that I think you must note is a new definition for vocational education. Whereas the original organic legislation had said "the training of workers and prospective workers" for three occupational areas, the 1968 amendments defined vocational education as "preparation for gainful employment in recognized occupations." At no point did the legislation refer to agriculture, trade and industry, distributive education, or any other of the occupational areas. Of course, the amendments go on for several paragraphs elaborating on "preparation for gainful employment" and saying that any kind of studies that prepare an individual for admission to a technical education program may be regarded as vocational education; and that guidance programs to assist individuals in choosing or making intelligent choices about programs in vocational education could be funded, even at the elementary grade level. You are going to hear a great deal about career planning in vocational education in the future, I am certain, because the Smith-Hughes Act had stipulated that no person under 14 years of age (in the trade and industry section--16 years of age) could be enrolled in these programs. At no point in the current legislation is any reference made either to the age of the students or to the occupations. I consider that to be a trend that people in your positions will want to note, because I think it has a great deal of meaning for you with reference to your responsibilities.

We could say then that the emphasis in the current legislation was to move from occupationally-centered programs to student-centered programs. Much reference was made to the kinds of students that would be prepared in the programs, and the law went so far as to earmark certain funds and state that these certain funds must be used for certain kinds of students only. For example, 15 per cent of all the funds allocated to state program development and support must go into post-secondary programs. The 1963 amendment had emphasized the post-secondary program, and this emphasis continued into the 1968 amendments, because under the Smith-Hughes Act and subsequent legislation the emphasis had been on youngsters of secondary school age. As many of you know, we are not always able to hold children long enough to give them the benefit of vocational education. So earmarking 15 per cent of all funds at the state level for post-secondary programs emphasizes the concern of Congress with this age group and especially for those who left school prior to completion of the twelfth grade.

Another group singled out for special attention was the "disadvantaged" student, whether he be disadvantaged culturally, economically, or socially. Fifteen per cent of all the funds that are spent in the state of Georgia for vocational education must go for programs for students in this disadvantaged classification. The State Department of Education must provide proof of this distribution. You are going to hear a great deal about this and should note that this is wording that is contained in the legislation. It is a must. When this legislation passed through Congress, there was a tremendous debate there concerning President Johnson's emphasis on the so-called poverty pro-

grams in economically depressed areas. In order to get the legislation passed the two groups had to compromise; the people who wanted to develop a big push in vocational education and the group that wanted to put money into social welfare programs had to compromise. As a result they agreed to write this requirement into the legislation. I am not prepared to say that it is bad, although many people in vocational education at first blush thought it was bad because they believed that it meant that their programs, the beautiful technician-level programs, were going to be watered down. This has not proved to be the case. We have had to work out programs to make certain that disadvantaged students could get the benefits of vocational education, but it certainly has not destroyed vocational education at the technician level.

Another group singled out for emphasis was the handicapped student--the mentally, physically, or emotionally handicapped student. Ten per cent of the funds were earmarked for this group, and the state department of education in the given state must show evidence that these students are receiving special attention. This has created some problems with other programs that are funded for the same purpose. I think, though, that many of the concerns are beginning to be alleviated because these different agencies are working together instead of in competition.

The 1968 amendments emphasize students, not occupations. They also continue emphasis on adult classes of different classifications and nomenclature; the secondary program is not spelled out, but it definitely is stated that vocational education will cover this area. The elementary school group is identified; and so the 1968 amendments put all the emphasis on students and none on occupations, which is a complete turnabout from the programs prior to 1968. None of you should accuse our friends in the State Department of Education of having set up these programs this way. They set them up simply because the law said they had to be set up that way to get the funds. If they had not wanted the money, they could have done without it.

Now, if I may use a cliche, we are in a different ballgame, and it will be played by different rules. This brings into focus some problems that we have to recognize, that people in your position planning school programs will wish to take into consideration.

The history of this state indicates that we are unable, or thus far have always been unable, to hold all youngsters in school long enough to give them the benefits of the twelve-year school program. We can talk about it all we want to, but the record indicates that we have had, still have, and will continue to have a terrific dropout problem. This means that programs that are planned for youngsters at the eleventh and twelfth grades or at the thirteenth and fourteenth years, the admission to which is based on graduation from high school, are not going to be able to service this group. This is particularly true of the disadvantaged student who is not going to get to that point.

Another problem is associated with this one. The downgrading of vocational education at the elementary level and at the high school level is a problem that has plagued us for many years. We have had some beautiful programs in vocational education in this and all other states at the high school level, and it is amazing to observe the kind of work that can be done with this age student. But when you determine relatively how many students enroll in and benefit from these programs, it makes you realize that we have never enrolled a very significant number of the total high school enrollment in programs of vocational education.

Many of you who come from small rural systems would tend to say that we have enrolled all of our students in vocational education. You, doubtless,

have a vocational agriculture and homemaking program, and practically all the boys and girls take some work in these departments. They do; you are absolutely right in such situations but when you take into consideration all the schools in this state, and throughout the country, only a minor percentage of students is ever exposed to vocational education simply because it just has not been offered in most locations. As a result of this, our U. S. Office of Education figures indicate that out of the current high school graduating class probably not more than 20 per cent is actually prepared for the next step--whether it be college admission or work. They just do not have the necessary preparation to enter employment. Many of them have the preparation to enter college, for they take the college preparatory curriculum; but they never intended to enter college, so they make no use of their preparation. This is a big problem, and as a result of our normal approach youngsters reaching the ninth or tenth grade, where they choose between curriculum tracks, have heard so much about the college preparatory program that they do not even consider vocational education.

An ineffective guidance program is another problem plaguing vocational education. I have no criticism to make of the guidance people; they work just as hard as the rest of us. I think sometimes we have assigned them an impossible task; the kinds of materials that are made available to them and the facts that they have to work with have made it easier for them to counsel students away from vocational education, though. Vocational funds may now be used for preparing youngsters to make intelligent decisions about vocational education courses, and I would hope that this is one of the things that will come to be soon.

Another thing that has been happening in this country is the emphasis on service-type jobs. There is a tremendous demand for people to take care of all the gadgets and appliances that we have in our homes, automobiles, and places of work. It sometimes seems that they stay out of fix most of the time, and the number of people that it would take in this service area is astounding. The pay is good, but we have not been able to enroll youngsters in service occupational programs.

Another problem we have had is the attitude toward work that some young people have. I think it is because of the environment, but research shows that most young people who are discharged from jobs are discharged not because of any inefficiency or lack of skill but because of their inability to work with the organization or with their fellow workers or to comply with the few requirements that are made of them in terms of when they get to work, how long they stay on the job, whether they take orders from a superior, and whether it is important to do good work or just any kind of work. These are problems that confront us in vocational education, and we have to think in terms of training the total student if we expect the vocational education program to be effective. Mere skill development--as many people have tended to think of vocational education in the past--is no longer sufficient.

Also, today's youngsters have no work experience; and unless the school is going to help them understand work psychology and their relationship toward work, secondary school programs are in for a difficult time in terms of the success encountered by their graduates.

I am on the advisory program for one of the technical institutes in a large metropolitan area and I was amazed last fall to learn that school leaders cannot use the term vocational education there. It is a bad word, because it implies work; and I suspect that this term is not going to be continued forever, and personally I do not care. I like the word; I grew up in it; it sounds good to me; but if somebody wants to call it "vocational development,"

that is all right, too. The U. S. Office of Education seems to be determined to call it "career education," and I find no fault with this. They have a new commissioner, and I suspect that one of the trends we shall see emerging is emphasis on a total career education program.

The new career development program is emerging, and we have some illustrations of it over the state. One of the first phases of it is the kindergarten through sixth grade program in which the youngsters receive information which will help them to make an intelligent occupational choice in later years. This program is serving a very important need. From kindergarten through sixth grade school teachers now are taking the responsibility for making the youngsters aware of the world of work and for developing respect for the dignity of work and their individual responsibility toward work. This is not to be done by vocational education people. It will be done by the elementary education people. The elementary teachers have always been student-centered and have never worried about the occupations. They will take a group of youngsters and do anything they can to move the youngsters along, so they are not going to object a bit to a career oriented program of instruction. However, some of us must help provide the materials they need to work with.

In the seventh through the ninth grades we are going to have career exploration emphasis. In this the school will attempt to take the youngster and build on the six years in which he has been exposed to work and the ethics of work and the importance of work. They will begin to let him see that there are many, many occupations, that people work in each one of them, that some of them have certain characteristics, while others have certain other characteristics. You as an individual have certain characteristics, and to be happy in life you match these with a career which is compatible. Career exploration makes students aware of the various opportunities in life for people to serve their fellow man and to get the benefits of the good life in return. In this state that program begins at the seventh grade or the eighth grade, depending on the organization, with the PECE program; and it is going great guns and doing a great job.

Another program that will be built on the PECE program will be a program designed to close down a little bit on the exposure and let the youngster get a little bit closer look at a limited number of occupations. We are training some 120 people as pre-vocational teachers at the eighth or the ninth grade who will set up what we are calling mini courses--about a six-weeks exposure in which the youngster who has studied hundreds of occupations in PECE can pick out during the course of the year four for in-depth experience for a few weeks in each. As a result of this the student will be in a position to make an intelligent decision based on a little bit of experience and observation. We are using hands-on experience instead of conversation and observation; in this step we are letting students work with jobs just a little bit. They are not developing any skills that are salable as such but learning how to produce something that is worthwhile and do it at a certain level of quality.

At the ninth grade this exploration type of approach will be continued. We hope to have a year-long experience in which the student can continue to get hands-on experience and explore in depth that area he has decided is most attractive to him during his recent career exploration studies.

Then we will have, at the tenth and eleventh grade in the large comprehensive vocational school, a multi-occupational curriculum in which we will not attempt to train the youngster for a single occupation but for a cluster of occupations. I do not think we are going to get very far taking two years

out of the life of a fourteen- or fifteen-year-old youngster and preparing him to be a carpenter or a plumber or a painter, because he does not know really that there is that much demand for that kind of worker or that he wants to put that much time to it. So the construction cluster will involve carpentry, masonry, wiring, painting, and plumbing, and he could learn at job-entry level all of these occupations to a limited degree. He will then be able to do one of two things: enter a job as a helper when he finishes high school or when he drops out (he has that option) or, if he likes one of these particularly, move on to the tech school and work at the technician level for the next two years.

The panel of consultants recommended strongly that emphasis at the high school level be put on work experience, getting students out of the laboratory situation if possible and putting them in a work situation where they can actually experience the demands of the world of work. The co-op type program at the twelfth grade is supported in a great way. The demand for such programs (and the state department has developed some) is very great. I predict that we will have either (1) the co-op or (2) the release of students to leave school and take a job in the afternoon with the blessing of the school, the school having identified the kind of work and the place of work. I would prefer the co-op program, but I am certain that in the large cities there will be some work assignment programs which will prosper.

Where there is a post-secondary school there will be the senior plan in operation, in which the seniors having elected an area for specialization will go to the post-secondary technical school (Vo-Tech school) and take the program offered in that school. They will do their other work in the morning in the high school and then move to the vocational-technical school in the afternoon. This is a program that is catching fire everywhere, and I think it is just as sound as it can be. I also see the traditional vocational program of a specialized nature--business, DCT, agriculture, homemaking--operating at the twelfth grade to prepare students for entry into these occupations following graduation from high school. Their base will be in work experience in lifelike situations.

For the small non-comprehensive type school, we are going to have for a long time the vocational education program that we have today--vocational home economics, business education, DCT, DE, vocational agriculture--because they are serving a great purpose. But to get all of the youngsters in our large schools into the program we are going to have to take a different approach.

The state department has developed a program for the disadvantaged student at the high school level. Let me mention the CVAE Program in passing. This is a fine program; it is getting a tremendous response right now. It is developed for the disadvantaged students, students identified in ninth, tenth, and eleventh grades as potential dropouts. We are training fifty-eight teachers this summer; we trained sixty last summer, twenty-odd the summer before; and they are moving into the schools with this type program. I visited one of the schools this spring and talked to one little girl who had almost been forced out of school for lack of attendance and failing grades the year before; and her record this year shows that she has not been absent a single day. I talked with her and asked her if she were going to drop out when she got to be sixteen, and she said, "No, I am going to finish high school." I said, "Well, you must like it better." She said, "Oh, yes, I love it." I then asked, "Why did you perform so poorly last year then?" She responded, "Well, I don't know, but the teachers changed." My question then, "How did they change?" Her answer was, "Well, they are interested in

me this year; they want to help me." The truth of the matter was that she became enrolled in this CVAE Program and the teachers were interested in her development and she felt that they were helping her to get to work and she loved it; and she said that she would be in school until she finished.

I cannot help identifying the emerging concepts and terms that you are going to hear a lot about. They are old; they are just as old as when I started teaching years ago. I saw teachers doing these same things, although they did not call them what we are calling them today. We have put a different twist on them and made them more appropriate to today; but in these elementary grades you are going to find the fused curriculum in which, rather than calling subjects English or math or science or vocational education, teachers will be working with projects in which all are fused together. The youngsters are just carried away with it; and for an old-line educator like me to be excited about an elementary program is rather unusual, but many people are excited about this program. These youngsters, when they get to the eighth grade, are not going to say, "I don't want anything to do with vocational education." They will love vocational education. I heard youngsters in the first, second, and third grades identify occupations that someday they wanted to investigate, although the teachers had never mentioned the idea of identifying an occupation as such.

The interlocking curriculum at the junior high and senior high level is illustrated by the English teacher's use of vocational education as the vehicle for teaching English. Before now, many teachers could not get youngsters to see the advantage of geometry or science or English. Yet, when youngsters are involved in something that they are interested in, they do see the value of these same disciplines because they see their usefulness. This is the interlocking curriculum concept, and it is working, too.

We are going to have growing interest in career exploration and career development programs. This may, in fact, become our identity, and I will not resist it if it helps us get all the youngsters into this kind of program.

The multi-occupational curriculum or cluster is an emerging trend at the high school level. Do not let anyone tell you that this is a threat to technician training at the post-secondary level. It does not mean a downgrading of any area; it just means better students are going into those programs. It means that students who go into the programs enroll because they know what they want.

I predict that you are going to have job placement as a school responsibility. The last report of the National Advisory Council indicated that schools should put more emphasis on job placement. The guidance people were terribly excited about getting every youngster they could into college; but if they could not get them into college, then that was it. The advisory council has said that we ought to have a person on the staff who is just as anxious to get them jobs, if they do not want to go to college, as to get others into college. I predict that at the high school level you will soon see a job placement person on the faculty. He may not be a new person or full-time in the task; he may be one of the teachers who is given some time off; but that will be his job, and he will do it too. He will identify places that youngsters can go to work and help them get the jobs.

There are other things that I could tell you. I repeat that vocational education is undergoing tremendous change, and I think it is for the best. I think that we are going to have some wonderful programs. Let me close on the same note with which I began: We will, if we can get the school administrators to involve themselves, move from 15 per cent of all school youngsters enrolled in the vocational education to 80 per cent enrolled. That we

have to do if we are ever going to service the needs of the youngsters in our public schools.

THE EMERGING NEEDS FOR OCCUPATIONAL EDUCATION IN GEORGIA

Dr. Charles McDaniel

Chairman, Advisory Council on Vocational Education
Superintendent, Clarke County Schools
Athens

I am delighted to have the opportunity to visit with my fellow school superintendents and I am particularly pleased to participate in this conference with Dr. McGuffey. He is one of the people here at the University who has worked with us very, very carefully and been most cooperative in all the things that we are trying to do.

I would like for us to think together today about the emerging needs for occupational education in Georgia. I have been convinced for a long time that we are going to have to change directions, and I might say that the thirty or thirty-five school superintendents here are going to be the individuals who have the main responsibility for changing direction in education.

I am concerned about many things. I am not just concerned about the dropout figures, 50 per cent or 30 per cent or whatever. I do not know how dropouts are figured, but I do know that if you will look at the number of students entering first grades and compare it with the number of graduates you will find, in most of the school systems of Georgia, that the attrition is pretty high. In Clarke County, for example, we start out in the first grade with about 1500 students and we graduate about 600 or 700 every year. But, as I said, I am concerned not only about the dropouts but also about the high school graduates who have no occupational training, who have nothing that they can do for a livelihood. We are now in the early part of the summer, and youngsters are looking everywhere for jobs; but when you ask them what they can do, most of them can do nothing. They say, "Well, I can't type. Can you use someone to fold letters, dig ditches, or something like that?" I am concerned about the five and one-half million people who are unemployed. Even though the unemployment rate is about 6 per cent overall, for young people it runs as high as 50 per cent for the black ones and 25 to 30 per cent for the whites. This concerns me a great deal. I am also concerned about the five and one-half million people who are underemployed. I am concerned about the minority groups and the disadvantaged. I am concerned that we have in our society literally millions of people who are taking out rather than putting in. I think this is the greatest country in the world, but those of us who have the responsibility of giving some leadership to the education sector are going to have to face up to the fact that we have been ignoring large segments of our society. They are hard to work with, and we have often taken the people that are easiest to work with and done the best we could.

Occupational education is not going to solve all of the problems of education, and occupational education is not the only concern of curriculum revision. John Goodlad, who used to be a Georgian, is now out in California beating the bushes about something he calls "the upside-down curriculum," and he has not even thought yet about vocational education. He is saying that people today have so much leisure time that we need to be teaching more

in the aesthetic area of life, that we need to be teaching more recreation and more art, music, and drama, that we have completely ignored this in order to teach algebra and some of these other things. I am convinced that we are going to have to have some revision of our curriculum. We are going to have to continue to prepare people for college and do a better job than we have ever done before; but there is going to have to be a major thrust in occupational education. Our society is now so oriented technologically that our survival depends upon the trained labor force, and we are going to have to continually retrain. Many workers who think they are very secure now are going to have to be retrained during the next decade.

As we move in this direction of change, then, what are the real needs that a superintendent of schools in Clarke County or in Tift County or in the cities of Dalton or Thomasville or Candler County or DeKalb must consider? I have listed five things that I believe we must do.

First, we must have a reorientation of beliefs. We are going to have to accept some new philosophy. We are going to have to recognize the problem and be willing to take a stand and do something about it. And, very frankly, your presence here helps me to understand that many of you think we need to do something about it. But there are 35 or 40 of us here, and there are 150 superintendents who are not here. Many of them are concerned and many of them are working on the problem. I am convinced that the superintendent pretty well forges the pathway ahead. If he is interested in doing something about a problem, then others begin to be interested in doing something about it.

Principals and other administrators need to be helped to understand that we cannot continue to go on as we have in the past, that we have failed miserably with many children. Half of the children do not graduate from high school, and half of those that do graduate do not go to college, and half of those that do go to college do not graduate from college. So that ends up with something like 12½ per cent, a relatively small number, finishing college. Many of the children who do not graduate from high school for one reason or another manage to find a pretty good niche in society, but I think it is going to get harder and harder and harder to do so. If we continue to ignore at least half of the people that come to our schools in the first grade, the half who do not graduate from high school, then we are going to create a monster in our society. The other half is going to have to work night and day in order to be able to support this monster. We are going to have to have a reorientation of beliefs of administrators. One of the groups that will have to be reoriented is teachers, and superintendents have a great deal of influence on teachers; but elementary teachers, high school teachers, English teachers, algebra teachers, all kinds of teachers are going to have to think this thing through. Change is not going to come about overnight, and some people will never be changed; but probably the teacher is one of the most important agents of change. We need to have first-grade teachers, sixth-grade teachers, English teachers, mathematics teachers, physics teachers, chemistry teachers and all kinds of teachers selling vocational education. We must have more "applied" academic education and the key to this is the academic teacher.

Another group that is going to have to be reoriented is the traditional vocational education teachers. Their sphere must be greatly extended. Many are insecure for they too are steeped in the tradition of their specific area. There is probably as much reluctance to change with this group as with the academic teachers. We must have an entirely different approach to vocational education, much broader in scope than we ever have had.

One of the things that we are going to have to do is to bring vocational people right on into the same chicken yard with everybody else. They ought to join the GAE; they ought to attend faculty meetings. They need to join the family. The task is too difficult for a divided camp; we must all carry the same flag. Some of our teachers will never change, but some are being changed and some are ready to change.

Not only are we going to have to have a reorientation of the beliefs of administrators, of academic personnel, of vocational people, but also our counselors and our students are going to have to understand some new things. We are going to have to improve the image of vocational education. I think teacher education going on throughout our state is going to have a reorientation of beliefs, and this is going to mean that somewhere in the preparation of teachers we need to help them to understand that we are not dealing with a classroom full of college-bound students in the first grade, that we are not dealing with a classroom full of vocational people in the first grade. We are interested in all youngsters! We must have a reorientation of beliefs beginning with the superintendent and going through the entire school program personnel, and I think probably this is where we need to begin working on the attitudes of people.

Second, there must be greater flexibility in the schedules of youngsters in school. I must admit that as a high school principal, I wanted everything in its own airtight compartment. I wanted to operate a rigid schedule, and I operated one; I was as rigid a high school principal as there ever was, because I did not like folks who left early or arrived late, who had to get out and go to work. This kept folks hanging around the doors. Parents drove by and they wondered why they were out there, and occasionally one would light up a cigarette while no one was looking. I wanted everybody to come at 8:30 and leave at 3:00, but I think we just might as well scrap that, because we are going to have them coming and going as never before in order to do the kind of job that has to be done. We are also going to have to help parents to understand that they are going to be coming and going.

Some administrators just cannot take this, and some local citizens cannot take it. Still, we are going to have more and more people operating in a different type of schedule. When we think of it, it is reasonable to recognize that some class periods need to be longer than the fifty-five minutes, that some may be shorter than fifty-five minutes, that some students need to be in school only two or three hours a day, and that some need to be in school all day. Some need to come late. Some need to arrive early. We are going to have to free ourselves from this locked-step concept of a six-period, fifty-five-minute day. We are going to have to do more cooperative type education. This is difficult, but I believe that if we can place a boy on a job and give him the training and support he needs at school he has a much better chance of becoming successful in the world of work. I am personally convinced that the more people we can place with someone for a portion of the day, the better off we are going to be. I am not sure but what we ought to take some of our own personnel and help to place some of these youngsters--black and white, rich and poor, those who are heading to MIT and those who will drop out. Many youngsters need to be placed somewhere in the community or allowed to go home and work. I have completely reversed myself about those who need to go home and work. If a father wants one to go home and work, I think that is exactly what ought to happen, after he understands the responsibility he has at school.

Third, we are going to have to have some curriculum revision. We are going to have to have, along with a reorientation of beliefs and flexibility of scheduling, extensive curriculum revision. There are many courses now being

taught which should be dropped, there are some which should be added, and most ought to be reivsed. I am personally convinced that there are many youngsters in our junior high and senior high schools today who ought to be taking all of the science they ever will have in a greenhouse, who should never have the traditional grammar course, never have the traditional algebra course. I think the youngster who gets his science in the greenhouse might need to work in a greenhouse after school. He ought to have a course that would teach him communication as applied to the greenhouse and another that would teach him mathematics as it applies to the greenhouse. This is very difficult to do. It is easy to talk about, but when you start implementing this sort of plan, it is very, very difficult. It is going to take some real planning on the parts of administrators; but if we do not do this we are going to see more and more of these folks dropping out of school. There was a time when the dropout did not bother us too much. I will be very frank with you; I was very glad to see some of them go. They were the ones who caused the trouble, and my business was to keep everyone in the classroom until the end of the period, so those who caused trouble got out. Now as I take a broader view, I recognize that those who caused the trouble and got out are still the ones causing trouble; they are the ones breaking in and picking up the school's IBM typewriters. They are on our welfare rolls, they are in our jails, they are up at Alto. The school has gotten rid of them and someone else is looking after them, but we might have been able to save some of them with a little different orientation. Thus, as I see it, we are going to have to make some real curriculum revisions. This involves many, many things. You cannot revise the curriculum until you have reoriented the reviser; and until you have reoriented the teacher, she cannot teach this revised curriculum; and until you have a fairly flexible schedule, we are just really talking through our hat.

Fourth, there must be some sequential development in this career education program, and it must begin early. It must begin at the elementary school, an orientation. We need to do heavy work in the junior high school or in the middle schools or in the upper elementary grades or whatever you might call it. I think our most critical area begins about the seventh grade; in the seventh, eighth, and ninth grades we can either use them or lose them. If we lose them, they may be lost forever. The program needs to be sequential; and, very frankly, we all need to get on the bandwagon if there is any way that we can do it.

Lastly, we must involve more and more lay people. I have heard this all my life and you have, too, but I am convinced as we move more and more in the area of careers that we ought to try to teach what the people who are involved in these occupations need. One of the real criticisms of vocational education in the past has been that we educate folks for jobs that do not exist. We have educated them in a fashion the employer did not want; and, as far as I am concerned, I am willing to throw out everybody's rules and rearrange the program and the school system for which I have the responsibility so that we can do the things for boys and girls that need to be done. We had a vocational-technical school on the edge of town that had a lot of empty spaces, and we had hundreds of high school kids that needed to get in; but because the money came from adult education we could not enroll them. Well, we sneaked them in for two or three years, and we did all kinds of things; and finally last year, after the vocational-technical school was closed to our students, I went before the State Board of Education. The State Board of Education said that they would think about it, and then they said, "Okay." Many times we are foiled by paper barriers. We must not let this deter us.

Inside our own little nest we have a lot of little divisions that keep us from being as effective in our operations as we need to be. I have them in my office, and we have them in the vocational education division of the State Department of Education, and we have them in our faculties--people who want to continue to protect their cubbyhole, their little airtight compartment. They do not want anyone to get out or go anywhere unless they have eighteen units and all the prerequisites. But the walls are tumbling down, and we might as well get used to it. It is important, for instance, for the air conditioning people in this community to tell us what kind of air conditioning instruction we ought to be teaching. There is no need in our giving the kind of air conditioning instruction that no one needs. We need to use more lay people, whether it is in a high school program or an elementary program or a vocational-technical school program, so that we can turn out the kind of people that Sears, a brick masonry outfit, or a construction firm wants. Part of this can be accomplished by a cooperative arrangement in which a student is out on the job a portion of the day.

I wish we could place about 30 per cent of our high school students in a cooperative program. I wish we could do that here, because I think we have that many who need to be placed out in some sort of cooperative arrangement. DCT, DE, and VOT are growing fast, particularly in the metropolitan areas, and they ought to grow in small towns too.

Well, basically I have said what I think needs to be said. I think the superintendent holds the key. We need very dynamic leadership, and superintendents can provide it. I recognize the problems. I recognize the inroads some of this philosophy has already made. It is going to be hard--as a matter of fact, it is going to take some folks' dying to change existing attitudes, but if you keep pounding this thing back and forth hard enough people will understand. I believe we have the most receptive attitude from the general public now that we have ever had for vocational education. I am convinced that this is where the money will be in the years ahead. I am not sure just how much money will be involved, but I believe that this is becoming a national concern, or has become a national concern. Just last year, for instance, the manpower bill which passed both houses but was vetoed by the president had more money buried in it than is spent for all vocational education twice over. Our nation recognizes that we are going to have to do something about retraining the people who have already been trained, upgrading many others, and doing something about those whom the public schools have failed. We are going to see dollars galore poured into the training of manpower; and a good portion of it is going to come to those of us involved in training young people. But more important than this is where the money is going. Occupational education can be the kind of program that will give many young people in our community the effective tools to become worthwhile, contributing citizens. I hope I am not hipped on this too much, but I am just convinced that we have many people wandering around the streets today causing you trouble and causing me trouble who could have been trained and could be making some contribution rather than being part of the problem.

Basically, the superintendent can make the difference. As far as the long-term effect of your community is concerned, you are probably the most influential person there. What you do influences your community. You have to take an awful lot of guff, but your influence in your community is probably the strongest influence there. None of us in these days of trouble should become timid. We have to stand up and be counted, even though it is unpleasant and unpopular. The handwriting is on the wall: we are going to have to change education in order to survive. We are going to have to change

our attitudes; we are going to have to have a reorientation of beliefs; we are going to have to make our scheduling much more flexible; we are going to have to revise curriculum like never before (some of it has not been revised in our lifetimes); we are going to have to make occupational courses as sequential as possible; and we are going to have to involve more and more people to get us a good base of lay support.

SYMPOSIUM: CVAE PROGRAM

Mrs. Pat Rutland

Coordinator, LaFayette High School
LaFayette

I appreciate the opportunity to address this distinguished group. I feel a little bit out of place with all of these doctorial degrees and State Department people; but I am here for a reason, to give you a coordinator's viewpoint of the CVAE Program.

It is not hard to talk about a program that you believe in, and I hope that you will know that I completely believe in the CVAE Program. I have been a coordinator for the past year. I will have to admit that I went into the program with a few reservations, because it was new; but by the end of the year, you could not put me in anything else.

I am going to assume that you know nothing about CVAE, which means, of course, that you want to know what those initials stand for. It is Coordinated Vocational Academic Education. Let me break this down and explain each word to you and bring about certain points.

It is a special program that has been initiated in the schools of Georgia, designed to meet the needs of the underachiever or the alienated youth. You as superintendents know what we mean by these terms. It is a co-op program in which students go to school approximately one-half of each day and work either in the community for pay or in a simulated work experience in the vocational laboratory for the rest of the day.

CVAE is a flexible program. It is designed to meet the needs of a large or small community--in other words, it can fit in any size community. It is flexible also in that we are trying different things--new approaches to education. We are not veering away from the traditional completely, because we still feel that the traditional is important; but we want to merge with the traditional to work the vocational part of the program in with the academic. That is where the words come from: Vocational Academic Education.

How does CVAE work? The coordinator's job briefly is to tie together all aspects of the program. The coordinator holds the program together with the help of many, many other individuals and coordinates the activities of the whole program. He works with administrators, with academic teachers, with students, and with people in the community. In order for this program to succeed we must have the community and the school working together. I have been most fortunate this year to have a most cooperative administration and to have a very cooperative community; therefore, my job has been made much easier than it might otherwise have been.

Another thing about CVAE is that we have classes in which things are taught without the use of a textbook. In these classes, the teachers try to meet the immediate needs of the students. I have been in class many times with a nicely prepared, fancy lesson plan, and other things have come up, in the group guidance discussions, etc., that I felt were more important than that lesson plan; and, therefore, that is what we covered on that day.

The CVAE class and the CVAE coordinator have a unique part in this program, because the coordinator finds herself in the role of a mother, in the role of a counselor, in the role of a teacher, in the role of a public rela-

tions person. All of these roles have to be merged together in order to meet the needs of the students, because, after all, the thing that we are interested in most is the student--and we always have to keep this in mind.

In the CVAE class we teach many things, but one of the main things that we try to teach or develop is a certain rapport with these students, so that these students feel for the first time, some of them, that they have someone who cares, someone they can talk to. Thank goodness, I was successful in this area. CVAE coordination is a twelve- or sixteen-hour-a-day job, not just an eight-hour-a-day job. The students come to you at home if you develop the relationship that you hope to develop. I once asked a person who works with us, "How do you know when you are too involved?" And do you know what this person's answer was? "There is no such thing as being too involved with another human being as long as you are emotionally stable and able to handle the involvement." I found this to be true. These students respond to care, to personal attention, attention that perhaps other teachers have not had time to give them in the past.

We try to teach employer-employee relationships and basic work habits and attitudes. I found this past year that I had to work particularly hard on attitude change because we take so much for granted with these students. I had never worked with this type of student before, and I took a lot for granted. I felt that their values were the same as mine, and I found out that this was not true. So I worked particularly hard on attitude change, and most of my success this year was in this area; but I feel that next year I can progress even more because at least I have them thinking right--wanting to learn, believing in themselves. Like I told them, some of them are like an old car that has begun to rust a little bit--it still runs, but it needs a little oil on certain parts. That is what we have tried to do.

Another part of the title is "vocational." I think all of you know what "vocational" means. It is being career minded and training for a vocation. A main part of our program--the core, I would say, of the CVAE program--is the vocational course. This could be home economics, but of course we might change the curriculum of this home economics a bit, and call it, perhaps, vocational home economics; this curriculum would be based on career orientation. For instance, things like child care, health occupations, food service, and floral design might be taught. These subjects would help to guide the students into careers, give them skills, or knowledge of skills, or knowledge of occupations, so that when they do go out they have something that they can work with. This is the core of the program.

Another thing is the interlocking process (notice the title "coordinated vocational academic") between the vocational and the academic. Consider the teaching of such standard academic subjects as English, math, and science. Many kids tune out at the mention of the word "English," so we dress it up a little bit and call it "communication skills." It is not, however, the same English that students have been taught all these years. In an ideal situation, the program is adapted to meet the specific needs of the children. The teacher uses whatever will work in his system.

We have a team of academic teachers who work together and meet once or twice a week. When they sit down at this meeting, the vocational teacher tells them about the plans for the next week. Then the communication skills teacher says, "Well, what communication skills can I teach that will tie in with what you are doing?"

Let me give you an example. Suppose the industrial arts teacher says, "Next week we are going to build a bookcase." The communication skills teacher sees that the students are going to need specifications for this

bookcase. This is a great opportunity to teach letter writing, but the difference is that it is not going to be taught as it is taught in the traditional classroom. These letters are going to be mailed, and the teacher tells them this. "Make them good, so that they can be mailed out to ask for specifications." The students are going to get answers to this, and they might even pick out the specifications to build this bookcase from the letters that they have written; therefore, this skill becomes meaningful to them.

The math teacher then says, "What kind of math do you need to build a bookcase?" Then he teaches the math that the students will be using in that vocational lab; therefore, the students see a reason for learning that math. When the math teacher says, "You are going to need this this afternoon in your industrial arts class," the student has a reason for learning. The science teacher asks what kind of science is involved. He decides that students need to know the makeup of wood, how different stains affect different types of wood, and so forth and so on; and he teaches the science that is necessary to the work at hand.

In addition to tying in the academic courses themselves, we find jobs for these students when we feel that they are ready to go out on jobs; and then we can also tie in (we use the word "interlock") the skills that are needed on the job. If you have a girl who is working as a waitress, then the communication skills teacher says, "What kind of communication skills does she need to do a better job, to be a better employee?" The math and science teachers do the same. All of this we feel (and I have seen it work) makes education more meaningful and more relevant to the student, and this is what we have to do. Work experience is a very important part of the CVAE program, but only when we feel that students are ready for work do we allow them to take a job as a part of the program.

We are involved this year in club activities in the CVAE. We have a new club that we are very proud of, VOCA, Vocational Opportunities Club of America. This past year was our first year, and I think it was very successful. I know that when forming a club was first mentioned to me, I said, "Oh, my goodness, I have enough to do without that." But I will admit that this club activity did more to spur these students on than anything else, because for the first time, they could identify with a club. It was a club of their own, and it really set them on fire. In their evaluation some of them said it was the first time they had been given the opportunity to be leaders. Some of the teachers in the school said, "Good grief, you mean so-and-so is president of the club?" They had never thought of so-and-so as the president of a club. But so-and-so did an excellent job. Therefore, I feel that the club work can serve as a learning situation.

SYMPOSIUM: PECE PROGRAM

Mr. Jerry Pevey

Consultant, State Department of Education
Atlanta

I am reminded in hearing about the CVAE Program of the time that I attended their state convention at Lake Jackson, and I was really impressed to see that the kids really enjoyed the program. I would imagine that some of their academic teachers would be quite surprised to see some of the activities in which some of the children were involved. It was the first time that they were really involved in their school work. They had seen other kids excel in school over and over, and they had not been successful at it. It is inspiring to see this kind of a program.

There is another thing that is quite inspiring, too, and that is the PECE program--the Program of Education and Career Exploration. What I would like to do is to give you a little bit of the rationale for this program and some of the details about how it operates.

In talking about the need for such a program, think back to about twenty years ago, about 1951. I imagine most of you can remember that year or about that time. You probably drove a six-cylinder car with a straight shift. You did not have an air conditioner in your car, and you did not have power brakes. You probably had just one car instead of two, and if something went wrong with it you could look under the hood and see what was wrong. Something had fallen off or worked loose, and you could see it. Well, nowadays, things are different. In fact, about six months ago, something happened to my car, and I went up to the service station and asked the man if he had some way of telling what was wrong with the car. He said, "Yes, pull it in here." He rolled this pretty little machine with several dials up to it, and he plugged in a couple of wires. He said, "Well, your points need tuning or adjusting." He did that and my car sounded better, but he said, "You need something else, too; you need new spark plug wires." I asked him how he knew that, and he showed me some little lines on a picture on the machine he had plugged in to my car. That is how he did it. He had learned this in school.

The mechanics back in 1951 probably went to school with Uncle Joe down at the corner garage. But our society has become quite complex. In Cobb County, where I lived and operated the PECE program a year ago, if I asked my kids how many of them had parents who worked at Lockheed, about 60 per cent of them would raise their hands. Well, what does your daddy do? "He builds airplanes." And that was about all they knew. They had some idea of whether their fathers had office jobs or not, but that was about the extent of it. We see this kind of thing happening all over. I remember my mother worked in a garment factory a long time ago, and one afternoon when I was outside waiting for her to get off, she said to come on in and she would show me where she worked. We went right on in--no problem. I would imagine this would be a little more difficult now. You see many factories that are behind fences; there is a brick wall around some. You do not really know what happens in there. The corner garage where the kids used to hang around is not the same anymore, either. You cannot go in and learn by watching; it is all too complicated. So, we feel that times have changed to the extent that we

have to provide new kinds of opportunities for students.

As I was thinking about changing times, I recalled how my mother used to talk about walking to school. It took about an hour. Times really have not changed very much; I have a car and it still takes me an hour to get to work. Let us hope that most of our changes are in the right direction.

Think about school and what has happened in education in the last twenty years. When I was going to school, I had six periods a day, each about fifty-five minutes. I had a homeroom with announcements in the morning. We did have to stay after school occasionally, and this seems to have gone away. But I have seen several schools this year that have six periods a day, each fifty-five minutes long, and a homeroom in the morning. The pupils sit in five rows, six people deep; and the teachers still use the old lecture method. When are we going to catch up? I do not know, but I think it it time. One of the things that we are trying to do in vocational education is to provide some type of experience for students to see work happening, give them an opportunity to actually try some things. This is where we came up with the Program of Education and Career Exploration. As I say that, I think of some other things that have happened. Probably twenty years ago when somebody told you his title or what his job was, you could understand it. When I go out to a school and say I am the State Coordinator of the Program of Education and Career Exploration, I am out of breath when I have said it; and when I try to explain it, I am even more lost. Here is another situation where things have become very complex.

We need, somewhere along the way, to provide students with an opportunity to approach systematically the world of work. According to Donald Super, who is supposedly an authority in the psychology of careers, around adolescence people need to have an opportunity to explore--he used the word "flounder"--in a systematic way, so that they can gather information for use later on in making a decision.

Again, thinking about my own experience, when I got out of high school, I had had twelve years of English, twelve years of math, twelve years of science, twelve years of social studies. I got ready to go to college, and they said, "You must have a major." I was not sure what that was. They said, "Well, what are you going to do?" I really had never thought about it. I made a decision, because the time had come to put something down on the application. Nowhere in my experience did someone sit down and tell me how to make out an application for a job. I probably had written business letters in English class, but I never role-played an interview; I had never had any concrete approach to applying for a job, seeking employment, looking for work. I was fortunate to live in a small community, and I saw a lot of things happen, but I think this is going away. Even now students come out of high school not knowing exactly where to go; the majority of them do not know how to apply for a job or have an interview. Somewhere along the line we have to get on the bandwagon. Let us make kids ready to be adults, ready to work; that is what some of them are going to want to do. I think we all agree with that.

Back to the PECE program. What we are talking about here is providing an opportunity for kids to get a look at the world of work, see what some of the tasks are, and, wherever possible, actually try themselves at it. The approach we use is to get them out of the classroom, get them out there in the community where some work is going on. Another thing is to let them review it under some kind of system whereby they differentiate between various jobs: what makes this job like it is? what abilities do I have that could make me successful at it? Doing this, you have to be flexible, willing to

withdraw some restrictions. We cannot live within the fifty-five-minute period. We have to provide some way for students to leave the school campus to do these kinds of things. Somewhere along the line we have to begin to realize that the world we are in is a different world.

Where do kids get their information about jobs? From television, probably. They see lawyers who never lose a case, doctors who always have very dramatic life and death situations, cowboys who always come out on the good end (and do not even have a short end to deal with), or a family man who never seems to work at all. So what do you get? Television is not bad--I am not saying that--but we need to do more in the field of education.

I can remember an instance in my program when we took some students to a hospital, and we were fortunate enough to put a student in the operating room with a doctor. He came back and said, "You know the thing that really got me was that they were talking about what they were going to have for lunch that day, and one was talking about a new car that he had bought. They weren't even nervous." Of course, they do it every day. Let us provide some way for kids to have experiences, let them get outside the four walls of the classroom, let them see what is happening. To do this, we have to have a trained person supervising the students. This is one reason that courses like the PECE program--"occupational" or "careers" courses--have failed in the past. People were not trained to do that kind of thing. The success we have had in the last two years--and there are sixty-seven PECEs in the state now--has been primarily due to the training program and the commitment that these people get through the training program.

SYMPOSIUM: INTERDISCIPLINARY PROGRAMS

Dr. Nevin Frantz

Assistant Professor, Division of Vocational Education
College of Education
University of Georgia, Athens

How many of you have been asked by newcomers to your communities, "What kind of schools do you have?" You perhaps have answered, "Sixty per cent of our graduates go to college," as if that were the sole criteria for a worthwhile school system. How many of you have a sign that says "Comprehensive High School" in front of your high school? How many of you have had a youngster ask you, "Why do I have to study this?" You may have answered him by responding, "Because some day you are going to need that" or "Well, Friday morning we are going to have a test on that and you better know it!"

I want to make three points based on the three observations above. Number one: in my travels around the state of Georgia, I have reached the conclusion that many high school programs are out of touch with the realities of the student population of Georgia. Approximately 60 per cent of the high school graduates in Georgia do not enter college,[1] yet most high school programs in the state are geared to the college-bound student. Number two: the isolation and the departmentalization of subjects and courses in our high schools leave little opportunity for them to test abstract concepts and principles in tangible concrete learning environments. Number three: it seems to me we need to create motivating devices other than waiting for "some day," that will enable students to obtain concepts and principles that social studies, math, science, and English teachers feel are important to acquire in order for an individual to function creditably in any career of his choice.

The school program should be changed from its emphasis on accommodating college-bound students to providing a balanced curriculum which considers the abilities, interests, and aspirations of all students. Barriers between subjects and courses need to be removed in our high schools. A need exists to provide reasons for young people to remain in school and acquire the knowledge needed to be successful, functioning citizens in our communities.

Jerome Rosow, Assistant Secretary of Labor, has summarized the problem very succinctly in the following statement:

> We give a lot of individual attention to youth in school. If a young person is going on to college, high school is designed to prepare him for college entry. Not so in the case of the non-college bound. Their courses typically do not equip them with a salable skill. School counselors know much about colleges but little about the labor market. In fact, very little faculty time or curriculum is earmarked for the non-college bound....[2]

New directions are needed in American education in order to provide opportunities for all students to graduate from high school and function cred-

---

[1] Goals for Education in Georgia. Atlanta: Division of Planning, Research, and Evaluation, Georgia Department of Education, 1970.

[2] Jerome M. Rosow, "Human Resources: Retooling Our Manpower." Saturday Review IV:41, January 1971.

itably in a career of their choice. One of these new directions is the interlocking or correlating of various subject areas with vocational education courses at the secondary school level. Several concepts of interlocking or coordinating academic education with vocational education have been proposed by advocates of the approach. One of these concepts utilizes a vocational education laboratory experience in interlocking the curriculum.

The laboratory method emphasizes an interdisciplinary approach where the principles of subject area courses are coordinated with the content of vocational education courses. Teachers of mathematics, social studies, science, and English relate the concepts of their respective disciplines to the knowledge, skills, and attitudes taught by the vocational educator. The lab experiences received by the student in vocational education are utilized by academic teachers as motivating devices where math, English, science, and social studies are related or applied in relevant learning situations (see Figure 1). The approach should assist students in acquiring a desire to attain the concepts and principles of a subject which would be reflected in their achievement of the objectives specified for the instructional program.

The preparation and planning, or Phase I, of an interlocked curricular approach to education is initiated by discussing the proposal wich administrative and supervisory personnel within a school system. If positive approval of the approach is provided by administrative personnel, the total school faculty needs to be informed of the interlocking approach and their responsibilities in the implementation process. The faculty should be provided time to react and discuss the proposal in small group sessions over a brief period of time. If the faculty provides a positive reaction to the interlocked curricular approach, teaching teams are formed which are composed of interested teachers representing the instructional areas of mathematics, science, social studies, English, and vocational education. Communication sessions should be held by the teaching team in order to acquaint each member with the objectives, content, and instructional methods utilized in each area (see Figure 2).

After informing each other of their respective subject areas, the team is ready to begin Phase II (see Figure 3) which involves implementation of the interlocking process. At the beginning, it is advisable to interlock curriculum on a monthly basis, rather than weekly or daily, due to the amount of communication and planning involved in the process. Each academic teacher comprising the team would select a topic or unit of instruction to be taught at a predetermined time during the month. This information would be transmitted to the group and responses would be given by the vocational education teachers regarding its application in the business, home economics, agriculture, distributive, or industrial education courses.

Classroom implementation of the interlocking approach would involve selection of instructional strategies by subject matter teachers that would enable students to acquire the desired knowledge, attitudes, or skills. Assignment contracts would be prepared to provide small group or individual assignments and applications for students who are enrolled in various vocational education courses. The assignment contracts would be utilized by students within the classroom or in a vocational educational learning experience which necessitates application of knowledge in successfully completing a laboratory activity. The contracts would allow individual attention to all students in a class and enable a performance based evaluation of student achievement to occur. After student completion of the instructional unit, the teaching team would meet to discuss the results and evaluate student achievement of the assignment.

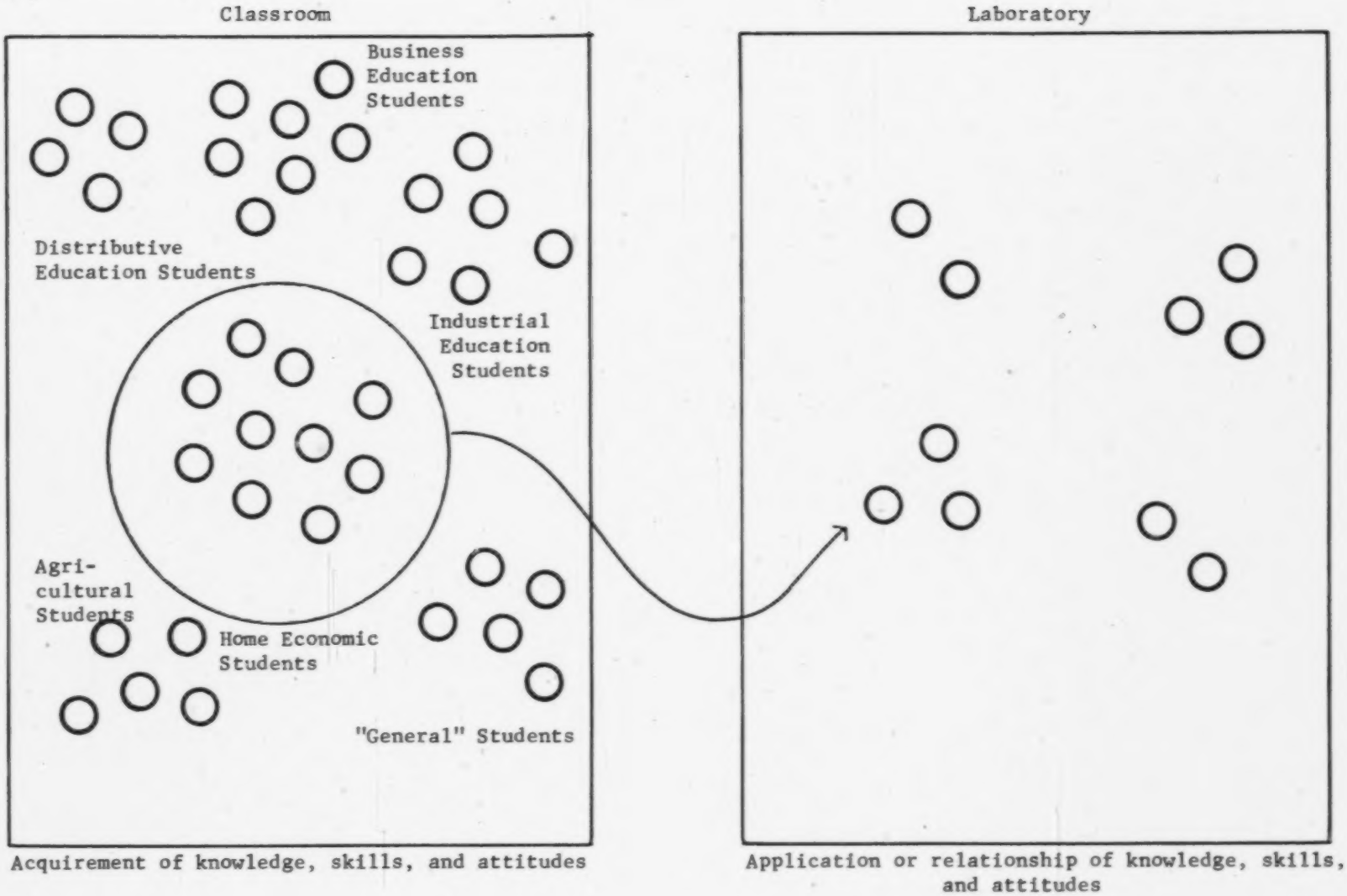


Figure 1. Interlocking Curriculum

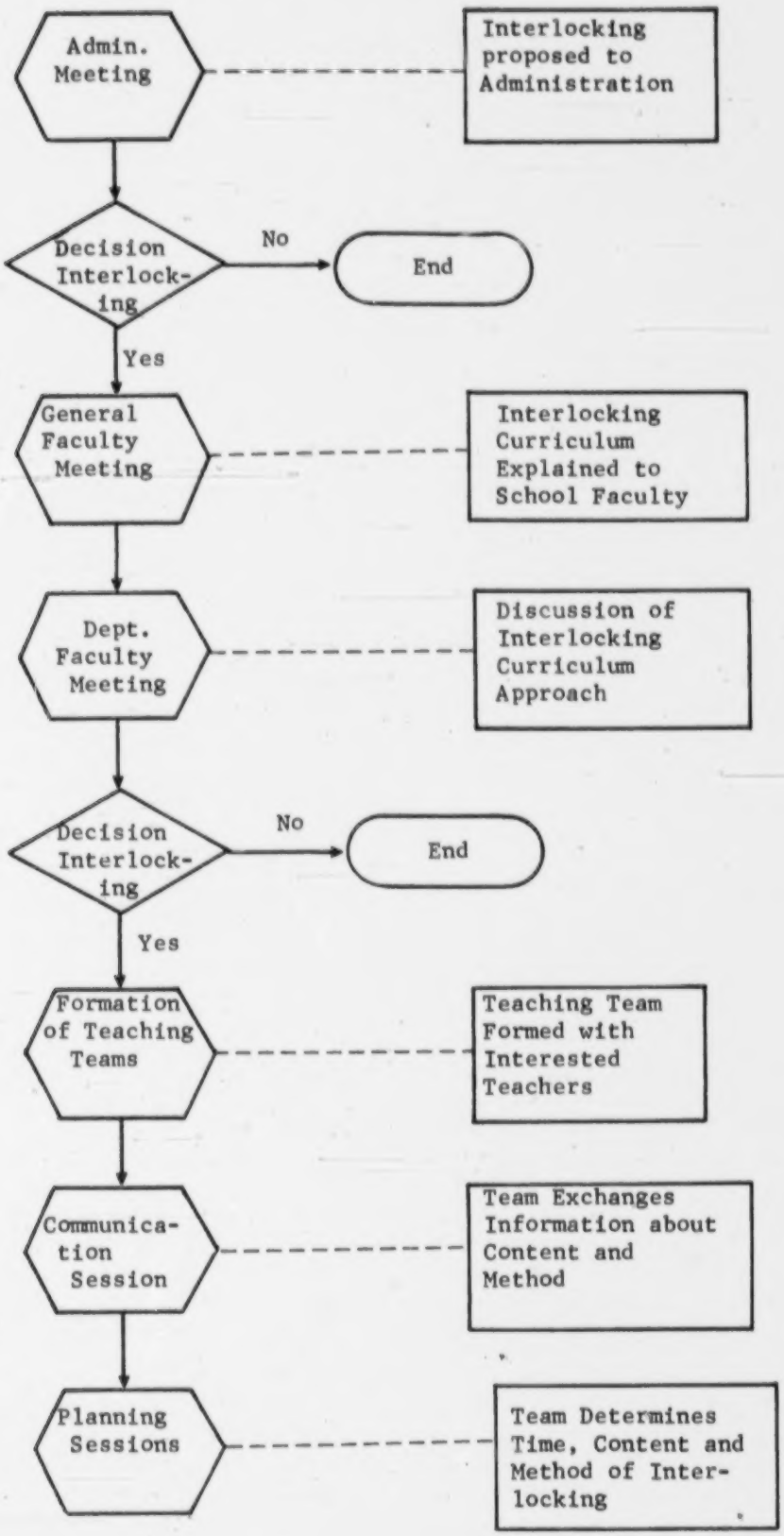


Figure 2. Phase I--Preparation and Planning of an Interlocked Curriculum Approach

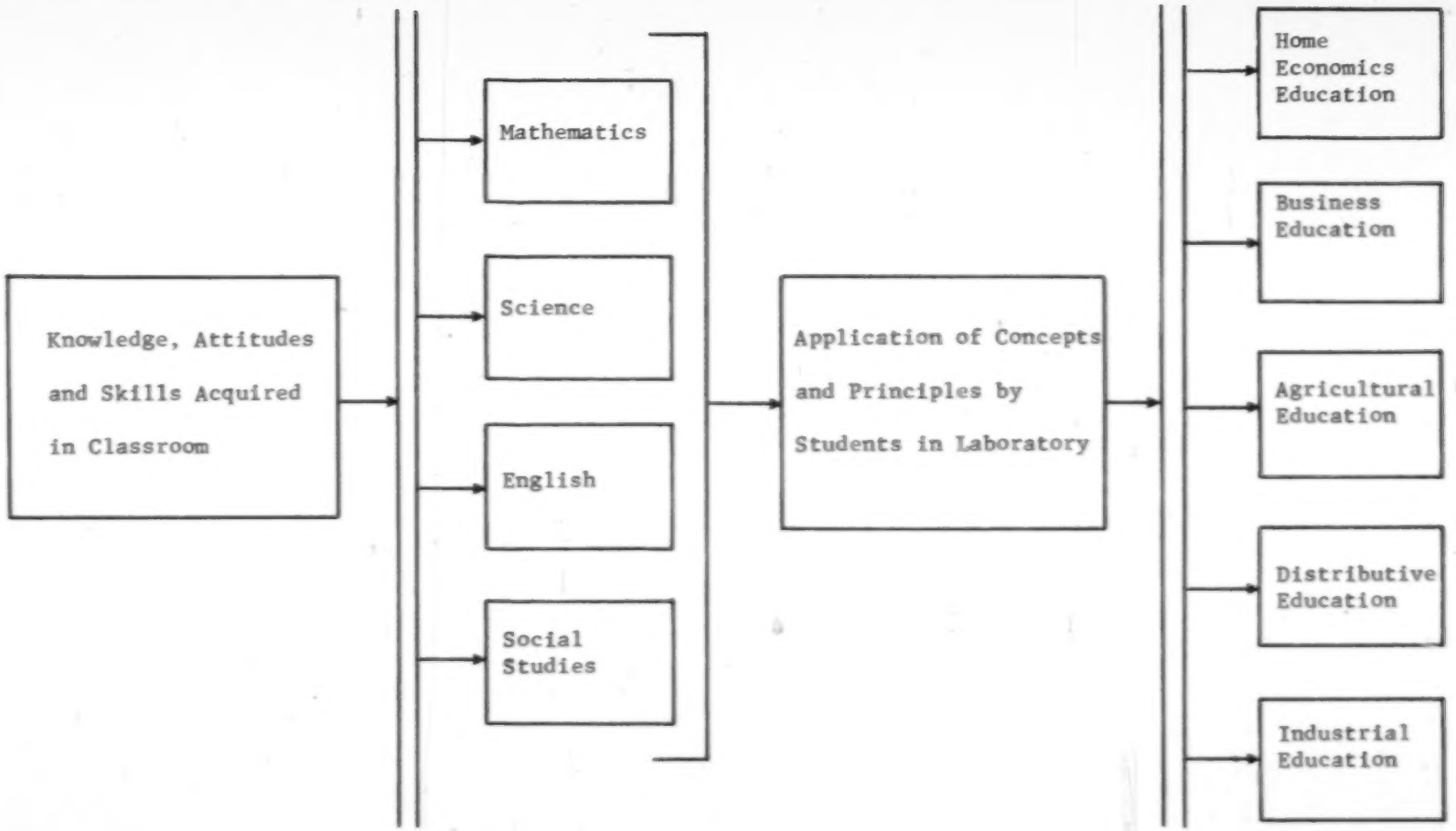


Figure 3. Phase II--Implementation of an Interlocked Curriculum Approach

In conclusion, the development and implementation of an interlocked curricular approach to education will require a total commitment on the part of administrators and teachers who become involved with the process. A review of pilot programs indicates that the success of the approach is based upon two prime factors: (1) the complete cooperation and encouragement of the school principal, and (2) a commitment by a group of energetic teachers willing to set aside at least one period per week to evaluate individual student progress and plan interlocked projects for future classes.

SYMPOSIUM: THE CLUSTER CONCEPT

Mr. Curtis Kingsley

Vocational Supervisor
Forsyth County High School
Cumming

Let me give you a little bit of background into the cluster concept as we know it in our state. One of the individuals participating in this conference, Dr. Frantz, who worked on the cluster concept research project at the University of Maryland, has had a real influence on Georgia's operation of the cluster concept in vocational education. Our school, Forsyth County High School in Cumming, Georgia, was one of three pilot schools beginning in September of 1969 to initiate the cluster concept in Georgia. We had six teachers in a workshop that summer to work with and find out something about the things behind the cluster concept, basically how it worked and how it could work. As a result of that, the cluster concept was initiated in our school.

I know all of you have heard of the cluster concept, having been in this workshop for two days, but how many of you really know what the cluster concept in vocational education is? In the report of the Georgia Council for Vocational Education in September 1970, it was recommended that in grades ten through twelve in the public schools of Georgia we provide vocational programs in broad occupational areas designed to prepare students for employment in a number of entry-level jobs. I think the council's statement in itself gives some support to what we are trying to do in initiating the cluster concept.

The cluster concept approach is a form of vocational education which is directed toward the preparation of individuals with skills, knowledge, and attitudes required for job entry into a family or cluster of occupations. Its basic premise is the development of individuals with job-entry capabilities for a number of related occupations rather than in-depth preparation for one single occupation. Basically the conventional approach to vocational education as we have known it in the past (and up to the Vocational Education Act of 1963) focused on training in one particular job or one particular occupation. The cluster concept is to add more than one occupation in a family of related jobs. Instead of a student's preparing himself for a mason job only, he participates in the construction cluster, which includes study as a plumber, as an electrician, as a carpenter, as a painter, and as a mason; and so instead of narrowing it down to one occupation, we have included five.

The design of instructional facilities and programs within the area vocational high schools is based on the concept that the multi-occupational approach to vocational education is better--that you can offer more courses to students with less money. We have about thirteen programs in the state that are available for initiation in a comprehensive school offering. These programs are offered on a two-hour block of time, instead of a three-hour block of time of the traditional day trade program. Also, instead of starting at the eleventh-grade level, it is dropped back to the tenth-grade level. This approach is based upon the evidence which indicates many high

school students are not ready to make realistic decisions regarding their futures.

Let me give you some examples of the cluster programs that we have in operation now. The one mentioned above was the building-construction program. It and the next three are very basic and are probably in more of the schools in the state than any other ones, but I do have some other examples. In the metal fabrication program, we offer entry-level jobs as machinist, welder, sheet metal worker, and assemblyman; all of these are taught within one course. The power transportation cluster prepares auto mechanics and small engine and diesel mechanics within one course. The electro-mechanical course is for home appliance servicemen, radio-TV servicemen, business machine servicemen, air conditioner-refrigeration servicemen.

Other examples of clustered programs that are available include the following: in home economics, the food services and the human services; in agricultural education, horticulture and agri-business; in health services, a paramedical program is offered in some schools. These are examples of some of the clustered programs that we have in the state.

Students in their junior year are provided with an option of enrolling in advanced multi-occupational programs or in another program of their choice. Consider Georgia's basic developmental program of grades ten through twelve and how the cluster program fits into that. If a student enrolls in one of the occupational programs in the tenth grade, he can either stay in that same cluster program as a level-two student or recycle to level one in another cluster program. Let me give you an example of that: a student was in power transportation the first year at the tenth-grade level, and he took it one year but did not want to stay in it for another year, so he recycled to another program, metal fabrication (drafting, electro-mechanical, etc.).

At the twelfth-grade level he may go into an in-depth occupational program at the vocational-technical school, and this would be basically what you and I know as the senior plan. He could go through the cooperative training program in vocational education at the high-school level through one of our co-op plans, or he might stay in that same cluster program and get in-depth instruction in that. An example of that would be going through the power transportation program at level one, level two, and level three in that one high school.

Then at the end of his twelfth-grade year he could advance on to another type of training to continue his occupational training.

Career decisions and development of occupational competence in a field of choice enables students to acquire (1) job-entry competence into a number of occupations where the opportunity develops or (2) specific skills in a single occupation.

The utilization of a two-hour block instead of the traditional three-hour block of time provides an opportunity for more students to enroll in vocational education by virtue of offering the basic program three times in a six-hour school day. Whereas heretofore in vocational education, offering two three-hour blocks of time, we have been able to provide course offerings for two sections of students, dropping back to a two-hour block of time permits us to reach three sections of students. So you can well see, considering twenty students in a section as the limit in vocational education, this plan could provide for training up to sixty students in a cluster. In a traditional program forty students would have been all that could have been served, so you see that it can serve more students, having dropped to the two-hour block of time instead of the traditional three-hour block of time.

A student who goes through one of the cluster concept programs gains

flexibility, mobility, adaptability, versatility, skill transfer, broad entry-level-job skills. He is not narrowing his choice down to just one job or one level. Another rationale behind offering the cluster concept in the high school is that students at the tenth-grade level do not really know if they want to be an auto mechanic or a machinist or a sheet metal worker or what. This is another reason for offering the cluster concept program; it helps students to decide and to make a decision as to what they want to be trained in.

We have found through the operation of the program that students seem to be more interested in taking the cluster program where they have a variety of activities going on at one time instead of just one shop for one occupation. If you put a student in there and just let him weld every day for nine months he is going to get tired of it. So the interest of the students is another reason to offer this program.

The students in our school who have been in the cluster program have, in several cases, been employed in one of the areas in which they have received some of this training during the summer. These are eleventh-grade students who will be back with us next year as senior students and be in our program for the third year.

You might be asking how it is possible to teach all these things at one time in one lab, because all the areas that make up one cluster are taught within one lab. We have various parts in the lab that are set aside for the various modules of the cluster. Over on one side there might be an area for welding, on another side there might be a machine shop, and in another place a shop for sheet metal. Because you do not normally find a school with enough equipment for all the students in a class to work on the same thing at the same time, students are doing various activities at the same time; and for the program to operate depends on the teacher. A program is being initiated to develop a teacher to teach in the cluster concept. Without a competent instructor, the programs cannot operate successfully. Without interlocking curriculum, without individualized instruction, and all the other things a teacher needs to do to get the best out of the facilities, the program will fail. With a great teacher, however, it is truly a great program.

SYMPOSIUM: K - 6 PROGRAM

Mr. Joel Smith

Director, Federal Projects
Cobb County Board of Education
Marietta

We have been talking about total education in this conference. We have been talking about all the kinds of subject matter areas that people need to be totally educated, about vocational education and its various contributions to that total education.

As you have heard most emphatically expressed at this conference, educators in the state of Georgia and elsewhere recognize and have been recognizing for some time that some portions of our educational program have not been totally adequate or appropriate to some portion of the students within our school systems. The attempt to correct this kind of inadequacy has been admirable indeed. The programs that you have heard about this morning have attempted to do just that kind of thing. We have attempted to come up and say, "All right, we as educators in the state of Georgia are going to offer our students some alternative."

In the Cobb County Occupational Career Development Project, which runs grades kindergarten through twelve, we are attempting to offer youngsters alternatives to some of the academic subject matters; we are offering them alternatives to some of the vocational subject matters. We are trying to give them a choice. We are using the CVAE Program, a semi-cluster approach, and the PECE Program.

I want to talk to you about one other aspect of our effort. I want to talk to you about the youngster's ability to make that decision when the time comes. This has been a problem, continues to be a problem, and this is one of the things that we feel career development in grades K through 6 will help to overcome. We feel that, when the time comes for a youngster to make his decision at the eighth, ninth, or tenth grade, he should have some kind of background for making that decision--some experience, some knowledge, some decision-making ability.

Our youngsters in the PECE Program go out into the world of work looking at on-the-job situations, talking with real people about real feelings about real jobs. "What are you doing, and why are you doing it, and how do you do it, and what do I need to know to do that kind of thing? Who am I in regards to this kind of thing? I am a high school student, I am a junior high school student, and these are the kinds of things that I think I would like to do. But how do they fit me?" In the PECE Program, youngsters are talking to all kinds of people. We do not have to sit down and ask a student whether or not he is going to college. College is not an end in itself; it is one of the many avenues that we feel like total education in Georgia will open up to our students. If a child is himself, knows who he is and the kinds of things he likes to do, then he can better consider the alternatives in choosing his next step. His education throughout life continues, so his educational choices should be based on some kind of experience, knowledge, and self-evaluation. And this is the essence of the program at the kindergarten through sixth grade level.

I hasten to point out that we in Cobb County do not feel that we have all the answers. We do feel that we have run into all the problems. So I want to share these experiences with you--experiences from this past year of Occupational and Career Development implementation in Cobb County, grades 1-12.

Think about a first grader painting a checkerboard. The many things that you do not see when you envision this particular scene are the ways in which this youngster's teacher has interwoven the other subject matter areas that he is studying at the first-grade level--the mathematics that he has at that level, the social studies, the language arts--and how these things affect what this youngster is doing. We are using units in Cobb County in this project to give a structure to the approach. We want to give the teachers enough security that they can feel that there is an end to this kind of activity, and yet the units are so structured in such a way that the teachers are able to "get on the wheel" any place they like. I would like to explain that a little further. We are using one such activity-centered project or unit per nine-week grading period in each of the classrooms within the project. There are several elements of career development in this particular approach that need to be covered in each unit; but the exact point at which the teacher "gets on that wheel" is really up to her. This flexibility allows teachers to make real contributions in terms of their own creativity and individuality.

A youngster in a fifth-grade classroom utilizing the career development approach might work on a unit based on photography. If I may, I will reiterate the several points of career development as seen in terms of mechanics. We are talking about a manipulative activity, a hands-on activity whereby youngsters can approach abstract ideas in a concrete way. We are talking about subject matters interlocking. We are talking about showing youngsters in the first grade and in the fifth grade how mathematics is appropriate for a particular kind of activity, how language arts are appropriate, how social studies is appropriate. We are talking about occupational information. We are not talking about having youngsters decide at the third-grade level that they want to be carpenters, or astronauts, or anything else. We are asking them to look at themselves. We are talking about community involvement in terms of resource persons coming into the classrooms, about community involvement in terms of field trips from the classroom into industry, resource persons into the classrooms and field trips into industry that are appropriate for this particular kind of activity that is going on at that time. We are talking about role-playing, appropriate, realistic, usable role-playing in the classroom; we are talking about children having a feeling of belonging to a classroom, and using all these elements along with self-exploration to find out what they feel about themselves, what they like, their attitudes, interests, and abilities. The total of all these elements is used to build some kind of base for decision making.

A teacher trying to figure a better way to explain a pure science principle, the refraction of light, wanted a graphic illustration, so she had her students make pin-hole cameras with oatmeal boxes. People have done that for years, since it is a graphic illustration. The students went from that point to making a more sophisticated pin-hole camera with a cigar box, and then they began to talk about occupations in photography, to talk about the kinds of people who are employed as photographers and in the various supporting occupations. What do these people do? How do they feel? The students and their teacher went into industry, to a processing plant where they talked to people who work in this industry. They invited a photographer

to talk to the class to let them know that the community is a part of their educational system, which it most certainly is.

Youngsters who are second graders might become involved in a restaurant through role-playing activities. A young lady who is a waitress takes the orders of her classmates sitting at the table. Youngsters became interested in this activity through the teacher's talking about the four basic food groups, so they named their establishment the Big Four Restaurant. The tie-ins that could be accomplished are limitless. The need is for a teacher who is willing to commit herself to another way of doing the same kinds of things that education has been trying to do for years--and that is teaching youngsters--and to utilize all the various aspects of education that can be put together to give this child a total picture of education, involving his home, his community, and his school.

Second graders might build a services counter right in the classroom. No second team will come in to handle these activities--the youngsters, under the teacher's direction, do the actual building themselves.

A youngster is working at a post office unit at the second grade level. One of the major aspects of this particular project I would like to point out to you as something you might utilize in your own system is that the finest resource material in the world is a refrigerator box--a post office can be a cleverly disguised refrigerator box. We have a standing order with every furniture store in Cobb County, so that any time they get a refrigerator box they will give us a call and we will go pick it up. Youngsters themselves get into this kind of activity in terms of the manipulative activity; they measure, cut, and paint that post office right in their own classroom. They utilize their alphabet in terms of the sorting of mail; they utilize the number usage when they take the mail from class to class. This particular project took place at Christmas time, and these youngsters mailed Christmas cards to various classes in the school. Each of them had an opportunity to work in the various roles within the post office. They found out that the carrier could not carry the mail until someone had sold the stamps and someone else had sorted the mail and someone else had made the stamps, and so they understood or began to understand some aspect of the interdependency of jobs, seeing that every occupation and every role in this particular activity has meaning to all the others and is important.

The resource person is a vital part of the project. Every person in the world is a resource person. The youngsters in the post office project talked to the mailman who brings the mail to their school. He came into the classroom and talked to them about what he did, how he felt about his uniform, how he felt about driving the truck. He told them that it was beneficial for a mailman to be able to read, and they listened to him and saw that it was the truth. They saw that there is a need for the letters to be clearly written, the envelopes to be clearly addressed, a need incorporating one of the many subject matter areas that they were working with.

A policeman can serve as a resource person, brought in by the youngsters themselves. This development of student initiative is one of the things that we are trying to achieve. If youngsters are going to make decisions later on, they need to begin to feel how the decisions are made; and in this kind of approach, it is very easy, with a committed teacher and a committed administrator, to allow the youngsters to make many of the decisions themselves.

Some students brought people in and talked to them about their particular occupations, how they felt about their jobs and what services they contributed to the community. In the case of the policeman, for example, they

asked him not only what it is to be a policeman but real feelings he had about his role. "Do you feel silly wearing that uniform?" (That is a major thing that we are up against right now in our society.) "How do you feel on Christmas night when you are out riding around in that police car by yourself and your family is at home?" These are questions that youngsters are capable of asking, if they are given the opportunity to explore such resources.

Some of our youngsters went to FBI headquarters in Atlanta, and there they got a feeling of realism--a feeling of relationship to their community, and the ways in which their community is willing to be a part of their education. They went into the FBI headquarters and an agent there took the name and pertinent data on two of the youngsters in the class and sent this off by wireless or whatever method they have to Washington and a reply came back in about five minutes that neither of these youngsters had a record; and that really turned them on--they had a feeling of a realness in that kind of activity.

Third graders built a puppet stage. This particular thing started with the teacher in this unit saying to her youngsters, "I want you to make a puppet, showing what you would like to be if you were grown up today, right this minute. If it changes fifteen minutes from now or if it changes tomorrow, that is okay; but let's do it right now." One young man depicted himself as an astronaut. A young lady who was really busy telling the boys in her class how to get on with building that stage held a bride doll as a symbol of her occupational aspiration, so I think she probably chose wisely there. At any rate, the youngsters built the stage, which was a part of all of the activity within the classtoom. This concrete activity does not mean that we are going to put the books away and go hammer; this means that we are going to learn through manipulating ideas and materials. One of the beauties of this particular approach is that when this particular manipulative activity is over, the product becomes a part of the youngsters' everyday school life. The teacher uses it. In the puppet stage example, the teacher let the youngsters act out the stories in their third-grade readers, using their puppets.

Some six graders who were leaving Blackwell School and going into middle school (junior high school) the next year said, "We want to be remembered." The teacher said, "Okay, we want to be remembered, and we are going to erect a monument to this sixth-grade class." So they built a horizontal bar for the playground, and all the elements of career development that we talked about earlier were tied in there. A man came out and threaded the pipe for them; a man who drives a cement truck came and told them of his duties when they were pouring their cement. They talked about geometry; they talked about pipelines; they talked about measurement. Many elements were going on within this one unit. One of the particular subject-matter tie-ins in this particular case revolved around the decision-making activity through which they decided the height of the bar. They could not decide how high to make this horizontal bar, so they went around to all the classes at Blackwell School to measure the shortest and the tallest youngsters in each grade. They averaged that out, then averaged the whole set of figures to reach a solution. I think that is a realistic involvement. They did, by the way, come up with such a divergence of heights that they made two horizontal bars, a high one and a low one; and both look very pretty sitting out in front of Blackwell School.

An example of a second grade academic tie-in could be a youngster operating as cashier of a restaurant. The register was made by the youngsters themselves right in their class. I like to look at career development as a verb rather than a noun, as a way of doing rather than another thing to be

done by already burdened teachers.

A very sophisticated project at the sixth-grade level where youngsters divided themselves into three groups, formed companies, and bid against each other to build the teacher a lake house included community involvement and all the academic disciplines.

Teacher involvement is very necessary; it is quite important that you be aware of exactly what is going on in this kind of concept, and it is quite important that the teachers be aware. Regular meetings with career development specialists are very important in order for teachers to be completely informed. Specialists should back them up in the mechanics of field trips and in bringing resource persons in the classrooms. Working with the principals is very important for keeping everyone aware of exactly what is going on at a particular time. Administrative commitment allows youngsters to work in small separate groups rather than in a group of six rows of five. Taking in the outside community, the surrounding nature, the businesses and industry in the county is a very important aspect of this process. Parental involvement in terms of field trips, in terms of resource persons, activities, and visitations is also very important.

Finally, I think the most important thing of all is that, in this process and in the process of decision-making activities, school can be fun.

INNOVATIONS IN OCCUPATIONAL EDUCATION

Dr. Jack Nix

Superintendent of Schools
State Department of Education
Atlanta

Some of the trials and tribulations that all of us go through from time to time make us stop and wonder if maybe we should not have taken the other fork in the road at some point in our lives; but as we stop and think more deeply about it, most of us are pleased that we have had the privilege of serving people.

Before I get into saying what I really came over here to say (and I have it written down so I won't make a mistake) I want to talk with you just briefly about some of these experiences that Doyne alluded to just a few minutes ago.

In March of 1960 when I was in the certification office--I had been in there about six months--one of the staff members came by and said, "Dr. Purcell is coming to see you sometime this afternoon. He wants you to do a job for him." I wondered if I had failed to do something or what this was all about. He came by very late in the afternoon and said, "Jack, the State Board and I are going to appoint a new director of the Division of Vocational Education. We have about concluded that you ought to be the person to take that job." To be very honest with you, I must say that when I left Banks County as school superintendent and went to Atlanta to be head of certification I thought I would serve there for the rest of my life. I had no desire and no inclination to go any other place. I told Dr. Purcell that I had just learned my duties in certification, that I was happy in my job and would just as soon stay there. He said, "Well, you think about it."

In about a week Dr. M. D. Collins came by and said, "Did Claude talk with you?" All of you know Dr. Collins and how he approaches people. "Yes, sir," I said. He said, "What kind of answer did you give him?" So I related to him my conversation with Dr. Purcell. A few days later Dr. Hubbard came by. In the meantime I thought about what a tremendous job it must be to be director of vocational education, because I had known people like M. D. Mobley and George I. Martin, the man in the job at that time; and I did not feel that I knew enough about the whole process of education to take on that responsibility. To make a long story short, on the thirtieth day of June, Dr. Collins brought me a letter. No one had said anything else to me about the job between March and the last day of June (and I certainly had not said anything to anyone about it)--when Dr. Collins brought me a letter and said, "Jack, here is your appointment as Director of the Division of Vocational Education. You are to report to that division tomorrow and take over."

You can imagine about how much sleep I got that night. I knew there had been disagreement for years between vocational agriculture and home economics, because I had been in on it as a teacher; and I knew there was some fuss between ag teachers and the principals because I had heard about that; but little did I know what a fight there was between T & I and ag and between distributive education and home economics.

It took from six months to a year for me to begin to feel that I was

really communicating with the heads of those different units. If you are a superintendent and work with a lot of different kinds of people, you probably know the problems I faced. On Sunday nights State Board of Education members frequently held secret meetings at the Henry Grady Hotel and would not let people from the press in. The first Sunday night in July, Dr. Purcell, Dr. Allen Smith, "Whitey" Bryant, and I met with the Board of Education at the Henry Grady. Dr. Purcell said to the Board, "This is 'Whitey' Bryant. He is going to take T. G. Walters' place as State Supervisor of Agricultural Education." (At that time the superintendent had the authority to appoint without the State Board's approval. In 1964 a law was passed requiring board approval.) Then he said, "All of you know Jack. He is going to take George I.'s place." Mr. Peters looked at me and said, "Jack, can you build vocational schools?" That was the first question he asked me. Marvin Griffin had given the board one million, fifty thousand dollars and the board had had it for a little over two years and had not built any vocational schools. "Mr. Peters," I said, "if you and Dr. Purcell and the other members of the board will help, we will build schools." He said, "I've got one other question to ask you--can you make vocational education a part of the total school program?" I said, "Mr. Peters, I will try."

Many of you have been in the school business longer than I and know that this has been a difficult thing to do--to get vocational people, physical education people, math people, counselors, curriculum people, and visiting teachers to feel that they are all going in the same direction. We met in this building with high school principals the year I was appointed state director. Clarence Lambert, who is now superintendent in Forsyth County, was a high school principal at the time, and he was having ag teacher trouble. Those of you who have been superintendents long enough know what I am talking about. Clarence was upset about the rules and regulations of the vocational division. I told him, "The ag teacher is your employee and you sign his checks. If you don't like him, don't sign his checks. He is not an employee of the State Department of Education. We may transfer the money to pay him, but he is an employee of the local school system."

We have come a long, long way since 1960 in trying to blend this whole thing together, thanks to many of you in this room who are administrators and teachers. We still have some distance to go. I think part of the problem has been on the state level, and part on the local level; but we are working at it harder than we have ever worked, and I am quite sure that we are going to make more progress in the '70s than we even made in the '60s.

Last week in Washington the Commissioner of Education spoke to us on Thursday morning, and then he spent the entire two and a half days with us. Commissioners in previous years would make a thirty-minute talk and then leave. But Marland stayed with us, and we were most appreciative. He had one commitment to make to us, and that was that he was going to work with us to build a better data collection system for the nation. I am on a committee which meets with him and members of his staff every two or three months to look at and review the kinds of information they are asking the states to generate and give to them. They are asking on the national level for a vast number of reports--413 of them with 96 billion items. The Commissioner has agreed that these should be reduced. He committed himself to, and is, reorganizing the U. S. Office of Education internally to assign certain deputies the responsibility for all data collection. We hope by fiscal '73 to have made substantial progress toward reducing some of the forms that are being sent out.

The other thing that he dealt with--and he talked at great length on it--

was career education.

Every Commissioner has to have something catchy to talk about. Jim Allen had the "right to read," and this one has career education. Of course, everybody agrees that one has a right to learn how to read. No one disagrees with that. No one disagrees with the idea of making career education available to people, either. Members of the General Assembly, in 1960, 1961, and 1962, wanted us to drop the word "vocational" because it was a dirty word (it had some connotation of only being for the dumb) and use the word "technical" instead; but we told them to forget about it. My position has always been that there is nothing wrong with vocational education, if we just clean it up and make it the kind of program that it ought to be. Historically most vocational programs have started in a basement or in an abandoned building. I started teaching in a basement, and I taught there for two years before I got into a classroom above ground. Vocational education is good; it is reasonable; it is a part of the total program; it is a part of career education, just like the college curriculum in a school is a career-oriented program. What the Commissioner was trying to say is that we must blend together academic education and vocational education to produce career education. If those students who are coming here to the University of Georgia or going to Georgia Tech, MIT, Southern Cal, or anyplace else, take all the physics and mathematics, all the English, all the academic courses, all the advanced courses that they can possibly take to get ready to go to one of these prestigious institutions, then that is still career education. It is still occupationally oriented education. You cannot identify it as anything else. The student who goes to school and takes a portion of his day in academic areas and a portion of the day in developing some type of manipulative skill is also career oriented and career directed; and whatever he comes out capable of doing will be dependent on how well we do our educational part. I think we have come a long, long way in this state, but we still have a long, long way to go.

We are living, you and I, in a time of great upheaval; and all you have to do to recognize this is pick up a newspaper each morning and each evening. We are living in a period of time when there is major dissent among not only social groups but also political groups. Economic theories, all kinds of philosophies and religious beliefs are in a state of turmoil. We have all kinds of conflict and upheaval taking place; and the education enterprise is no different, because it also reflects the conflicts of some of these other areas. You might say that we are under fire, those of us within the educational enterprise. One of the places from which we are getting most of our criticism is the U. S. Office of Education, and this we pointed out to the Commissioner last week. One of the officials in the U. S. Office of Education said, "Every secondary school in the country can prepare a youngster for college, but not one can find him a job."

You and I know that this statement is really an exaggeration, because we know that many very fine, effective efforts are being made to combat just exactly the problem that this statement expresses. We recognize, too, that education for too long promoted the idea that the only good education includes four years of college. When I was growing up all we heard was, "You have got to get a high school education; you've got to go to college." Well, I have a stack of applications for jobs from PhD's right now, and I cannot use a one of them. There was an article in the Washington Post last Friday morning about how many PhD's are now unemployed--some 230 of them--in Arlington County. And the Labor Department was trying to figure out ways of retraining them. We have the same problem scattered about over this state. I

am not speaking disparagingly of college education, but what I am trying to leave with you is the fact that the people of this nation have overemphasized the importance of a college education. "Unless you get a college degree, you are nobody." Eighty per cent of all the jobs in this country do not require a college degree for people to be successful in them. Many of the people on these jobs will have degrees, but their job does not require the degree. The National Advisory Committee on Vocational Education has said: "The failure of our schools to educate to the level of adequate employability nearly 25 per cent of the young men and women who turn 18 each year is a waste of money and human resources."

All you have to do is think what will happen to the fifty-eight thousand-plus high school graduates this year in this state. What are they capable of doing? What about the other about twenty thousand who did not make it from the ninth grade to the twelfth grade? What have we prepared <u>those</u> people to do? Are we still measuring the success of our high schools by the number of college scholarships we get for high school graduates? This is excellent for those who are going on to college, but so many times that is where we stop in trying to measure how good our high schools are. I have bragged about how many students graduating from my high school were going on to college. I have been boastful of this over the years. As I was able to increase the number I thought, "Boy, I've got a better program." I never stopped to look at those who did not go on to college. In the face of all the current criticism from industry for failing to supply enough skilled workers, criticism from students for failing to provide an education that is relevant, criticism from parents for failing to discipline young people and teach them the value of work, education must pick up the pieces and attempt to put them together in a workable, coherent system that will meet the needs of our diverse society.

The educational system of a society must reflect that society, and all the technological advances of that society must be applied to make the schools more meaningful to the people they serve. The system we design must reflect this country's continually increasing demand for trained employees in the professional, technical, and service occupational groups. I would draw a double line under the service occupational groups. With more leisure time coming, we are going to have to look longer and harder at supplying society's need for people that are capable of rendering service to other people.

According to the U. S. Department of Labor's Study of Manpower in the Seventies, demand for professional and technical workers will increase by 50 per cent by 1980. Service occupations will rank second only to professionals, with a growth of 45 per cent. There will be many, many good jobs in the economy for which a high school education is sufficient. There will be more than 15 million operative jobs. Clerical occupations, with more than 17 million workers, will be larger than any other occupational group. How many of you turn out high school graduates that can take dictation and type, can spell, can frame up a letter, can express a thought that you pass on to them, can file something and find it when they look for it? If you can do that for a girl graduating from your high school, that girl has something she can contribute to our society and at the same time be a productive and responsible person. Jobs in the craft skills will continue to be well rewarded financially, reflecting a continuing need for the highly skilled workers in the economy that we are now experiencing.

The challenge of education is quite clear. The public schools must offer an educational program that will insure every person who leaves the system an opportunity to enter the work force in a respected, well-paying job or to continue his education in whatever way he chooses. Notice that I said

"every person who leaves the system." I did not say every person who graduates from college; I did not say every person who graduates from high school, but every person who leaves education at whatever point he leaves. It is up to us to keep him in school long enough to insure that he has this capacity when he happens to leave.

In an effort to meet this particular challenge in our own state, we have literally redesigned vocational education to assure its place in the mainstream of education. Since the passage of the '68 Vocational Education amendments, we have moved to a developmental, comprehensive, and integrated program. If we can collectively carry out what the State Board of Education approved last week and what the State Advisory Committee has helped us to develop, then we will make a revolutionary change in what has historically been public education in this state. We can do what they have approved only if we merge our efforts in the business of making not only vocational education but also academic education relevant to the particular person's needs.

What we have done is pretty much developmental in its structure, with objectives that focus on goals by grade level. It is comprehensive in that it provides program options for all students and a distribution of vocational enrollment that reflects the distribution of manpower. It is integrated in that it is related to other school discipline areas in order to make both meaningful to the student. By the fall of this year Georgia will have at least fifty secondary schools in which students will have access to a developmental vocational curriculum from the seventh grade through the post-secondary school. The establishment of seventeen goals in vocational education is really a major step for it gives us something to reach for, to strive for. Until now everyone had his own goals, and we were all going in different directions. Now needs are being defined according to educational levels. We have involved students, businessmen, and the entire community in setting directions, and we have considered the distribution of manpower and geographical factors. Care is being taken to set up program priorities so that funds will be allocated to the schools where there is a major need, such as a high dropout rate. We are not going to correct it all with these kinds of programs, because there are other factors involved, but this will be one way that we can help the local systems, boards, and superintendents to deal with this problem.

Some of our goals are rather far-reaching and impressive. Let me mention just a few of them to you, fully recognizing that Georgia is the largest state east of the Mississippi, that we still have some eighteen hundred-plus schools in the state, about five hundred of them high schools (189 school systems) and that we have 4.6 million people and almost 1.2 million children in school. This is a big undertaking, a tremendous undertaking. We will have to go at it as we can get the funds and as we can get people's attitudes adjusted (I will not say changed, but adjusted) and as we can get staffs that can carry out the kinds of operations necessary to reach these goals.

We do not have a state-wide kindergarten program yet, but many of you do have kindergarten programs. We have kindergarten for all children in several systems. To begin with, our goals will be to begin in kindergarten and continue through the sixth grade. This is really earth-shaking if you think about the philosophies of vocational education of just a few years ago. Programs through the sixth grade will make children aware of the whole world of work and of their roles in life. Too many children go through the early elementary grades not even knowing what kinds of occupations we have. They do not even know what kinds of requirements, even basic requirements, permit people to move into some of these. You often hear a child who wants to be a fireman, a policeman, a pilot, or an astronaut. Sometimes parents and

teachers discourage him and try to get him to move in some other direction. First of all, we must make him aware of what the whole world of work is about.

The next goal is to provide youth in grades seven through nine with exploratory and pre-vocational programs and experiences geared to the vocational developmental tasks. I have known children who made up their minds to quit school as soon as they reached sixteen, and there was not anything that anyone could do about it. Parents and teachers cannot do too much about it; but as a result of this decision on the part of that child, that child becomes a problem to the academic teacher. He does not care anything about mathematics, cannot see the value in it. He does not care anything about English, cannot see any need for it. So somewhere along in these middle grades we are going to have to give these young people a chance to develop their interests.

I visited a class last year in which a group of eighth- and ninth-grade students were working after school hours for one week in one kind of occupation and the next week in another kind. The coordinator had it worked out so the students could get a half dozen different experiences in a brief period of time. I asked these children what this had meant to them? A little girl spoke up and said, "I used to think I wanted to be a nurse, but never again." Why? She had worked a week in the hospital and had the privilege of staying in the operating room one day when an operation was taking place, and she said, "Never again." Now suppose we had let that girl go all the way through school, graduate, go to nurses' school, and then find out; we would have wasted a portion of her life. Another little girl said, "I know what I am going to be; I'm going to be a teacher." Why? She had worked as a teacher's aide in a private kindergarten. She said, "I love little children, and I would be happy working with them." This represents just two individuals; but one of them knew what she wanted to do, and the other one knew what she did not want to do. I would submit to you that it is just as important for us to know what we do not want to do as it is to know what we are interested in.

The next purpose is to provide youth in grades ten through twelve with work attitudes and job interest skills in broad occupational clusters or to give them a foundation for more specialized secondary and post-secondary education. Just a few years ago people in vocational education thought that, before we could turn a person loose, he had to be completely proficient, without question, in one given occupation. You can hardly do this for all students in the secondary school program if you couple vocational training with the academic requirements for graduation. I think another area we need to take a look at is our requirements for graduation. Maybe this needs to get into the accreditation program with the Georgia Association, the Southern Association, our state standards, and a few other things. It is not necessary for us to turn this child loose from high school, completely, unequivocally skilled in one little occupational area. If we give him enough of the right kind of experiences and the right kind of instruction, he ought to be able to begin to adapt himself as he goes out into the world of work and to pick up jobs that might relate to the cluster of training he had back in school. Narrowing his opportunity to one particular area is not necessarily good, because, as you and I know, we have to be retrained quite often. That is what the superintendents at this conference are doing, getting some retraining. It does not make any difference what career or occupation you go into, to keep up, you have to be retrained.

We must provide entry skills and job upgrading skills to adults in or

desiring to enter the labor force. Here I am talking about adults. I recently saw a report relating to Lockheed's C5A and the fact that if they do not get the two hundred fifty thousand dollar loan they are going to have to cut down on personnel at Lockheed. It is my understanding there is less unemployment in the twenty to twenty-five age group in the Cobb County area than in the twenty-five-and-up group. What would this indicate to you? We have done a pretty good job in the vocational schools of providing these people with skills and the ability to adjust that the older people do not have. Now we are going to have to go back and take a look at some of the people that we turned out of the high schools several years ago, and provide them with the skills, attitudes, and competencies compatible with the present and future needs of Georgia employers. We must assist consumers in making wise use of their income. We must improve the home environment and quality of family life in general. We must interweave vocational education with a total educational system that will educate the whole person. These are just some of the directions that we want to take in this total area of vocational or occupational education in this state.

Let me tell you some of the things we are doing. We are building a type of accountability and encouraging planning for vocational education at the system level by requiring systems to state goals and to prove they have met them before a project funding will be continued. The demands for accountability are terrific. When we put money out, we require you to set up what you are planning to do and tell us how close you came to doing it; then we determine whether or not we will give you money to keep doing it. If you have not reached your goals, there is no need for us to continue giving you money. We are applying this concept very successfully in the projects of the Vocational Division for the disadvantaged and handicapped over the state. Many of you have had these projects. We have these projects approved. Many of them are in operation and others are starting. When that project is completed, you must tell us how well you did what you said you would do.

Pre-vocational courses at the junior high level--such as the PECE program (Programs of Education and Career Exploration)--allow students to perform simple tasks in work simulated environments. This relates to a broad area and may include one of six major groupings--service, business, organizational, expression of ideas, outdoors, or technology. CVAE relates to the high school program that is designed to identify the students who are potential dropouts in grades eight through twelve. It attempts to coordinate the student's on-the-job training with his in-school vocational and academic courses. It tries to blend it all together and make it work for the benefit of the individual. It really is a program designed to accept a person where he is and to take him from there. When you have finished with him, you have given him the basic academic knowledge that he needs, along with skills, experience, and attitudes that he needs for employment.

The cluster curriculum relates to training in occupational areas. As an example, consider the automotive area. Heretofore, we have been trying to say that we were going to turn out auto mechanics. In the program outlines that we had in the early '60s, this was about a two-year program. Many of the students liked to tinker around with an automobile, but they did not want to tinker for two years. However, if we can train them for the cluster of things that surround the automotive field and give them some entry skills--as tune-up man, transmission man, etc.--then once they get on the job they are going to develop the refinements of the given areas.

Project employment is an attempt to find summer employment for some students. The governor joined with us on this. Mr. Mulling has sent out some

information trying to get this program under way. Remember, we try to educate, but we have lacked the capacity (or this is the criticism that we get from the federal level) of placing people. That is one of the reasons the Labor Department now has two billion dollars of federal money for job training, while we have less than six hundred thousand for all vocational education in the nation. The Labor Department has two billion dollars for job training because they are saying, "We place, we place." If we can educate and place at the same time, then we have a double-barreled approach, and hopefully somewhere down the line we can ward off the second system of education that is being operated by the Labor Department. You will be surprised, unless you have studied it, to learn how much effort is being made on the national level to turn everything related to people getting jobs over to the Labor Department. Even our own state's senior senator is advocating turning over a great deal of education to private business and industry. I have written Herman concerning this a time or two in the last two or three years. I do not buy it; I do not agree with it; I do not think they can do it cheaper than public education. They did not do it in the Job Corps--I think that averaged about ten thousand dollars per student in most places. Just think what you could do if you had just half of that ten thousand dollars per student per year. We have literally wasted millions and millions of dollars in this nation through experimentation with some of these ideas, at the same time looking down our noses at some of the tried and proven programs--such as in the occupational programs.

I have not really given you all the new ideas or concepts that we have talked about at the state level and how we are going to redirect, reorient, become more accountable about education; but it can take place with us guiding and directing it as we have tried to do with this new approach of occupationally oriented education, vocational education, career education, whatever you want to call it. We have tried to give vocational education a new direction in recent months and recent years, and how successful we will be with it will depend on how well those of us responsible for administering these programs can pull our resources together and get these resources to work together rather than at odds.

We in the Department of Education are now looking very carefully at each individual division internally, and hopefully in the next two or three months we will have some recommendations to go through the State Board of Education from the department and from the committee of the State Board of Education concerning the internal organization within each of these divisions and the Office of Instructional Services.

One of these divisions is vocational education. Though it is very difficult to start moving people and reassigning people, the time when we can sit back and try to carry on all of the old things that we have known is long past. We do not have enough resources to simply add to the old, so we are going to take a long hard look at our internal organization. I would suggest that you superintendents take a hard look at yours, too, because when we at the Department of Education send you money or people we want you to know that those are your people, not ours. We exist solely for the purpose of helping local systems. It may be that sometimes you do not believe that.

Some of you perhaps think the Instructional Assistance Program is a little unfair, but you have to understand that we are under the gun. In fact, the General Assembly is really going to supervise that program, because they want to know if the school people in this state have the capacity to take money and use it for remedial work to help students. If we can prove

to them we can, then in January we will get a substantial increase in that area. Sure there is a lot of paper work to it, but the reason we are going to have a lot of paper work is so I can justify the program in January.

By the same token, we are going to have to take a long hard look at each individual area of finance in education. We now have a number of state auditors on the staff going to five school systems in this state, and the state auditor is sending people out to see if our administration of funds is legal. Then they want a report back--a kind of performance auditing. This is not just in Georgia. It is all over this nation, and every state superintendent I talked with last week in Washington said he has the same thing in his state. As we look at education, in terms of bringing new approaches to vocational education, new approaches to all of the academic areas, and weaving it all together to help people, I think we will be in a position to point with pride to what we have been able to accomplish by everybody working together. I hope you will continue to help us to work with our vocational people and our academic people. I hope you will develop ways internally in your organization to get these people together. We are not seeking this for the glory of any particular phase of education. You cannot be successful in vocational education unless you are successful in academic education, and you cannot be successful in academic education unless you include occupational orientation in your program.

These are my somewhat rambling comments to you. I would hope you will accept them as comments, suggestions, and ideas that we are trying to implement on the state level to be of help to you. I also hope if you have ideas that I have failed to mention, some ideas you think might help, you will send me a report from your institute or from you as an individual.

ACCOUNTABILITY: THE STATE OF THE ART IN OCCUPATIONAL EDUCATION

Dr. Ron Luckie

Assistant Director
Division of Planning, Research & Evaluation
State Department of Education, Atlanta

This is a real opportunity for me. I have always wanted to tell superintendents something, and here is my chance, all just balled up in one opportunity. I would like to discuss accountability in vocational education and what I call the management that is required for accountability to take place.

The first thing that I would like to say about accountability is that you are now accountable; you know that; you have known that ever since you have been a superintendent. You answer to nearly everybody; and everybody holds you answerable. They hit you from every side and from every angle. So when we talk about accountability, I do not think we are talking about something that is new, something that you are not completely aware of.

I would like us to change the emphasis in what we answer for, however, and what I will be attempting to emphasize today is accountability for production. That is not a new concept either. Most of you are aware of accountability for production. However, I do not really feel like we in education have been accountable or hold ourselves accountable for production. There are some existing situations in our social order that I feel make it imperative that we look at accountability very carefully. I am sure that you are aware of the decreasing budget for education that is occurring nationally. We really have not felt this too strongly in Georgia, but I know some of you have felt, if not a decrease, at least a standstill.

Since 1830 the cost for education has been steadily rising nationally at an average increase of about 6.4 per cent over that period of time. And the rate has not really decreased that much now. There is a concept, however, that indicates that if a sub-system grows faster than the total system, the sub-system becomes the system. That makes a little bit of sense, does it not? If a small part of a whole is growing faster than the whole is growing, before long the small part will overtake the whole and become the whole. Since 1830 education has been rising in our economy at about 6.4 per cent per year. At the same time the gross national product has been rising at 4.3 per cent. Well, if we project this continuous situation from the 1830s, we see that in about the year 2050 the cost of education will actually overtake the GNP, and the total amount of money that is available in the nation will have to be spent for education. Education will become the total society, the total economic picture.

We know that will not happen, of course, because we have a great many checks and balances on us. At the same time, I think we need to recognize that we have probably got all the pie we are going to get. That puts us in a different kind of perspective as far as managers are concerned. In the past, we have been able to calculate an increasing amount of money for our operation. I recognize that Georgia has not yet reached the national average of expenditure. However, we are, in this regard, in a less enviable position than other states, because we actually spend in education more per capita than do many other states in the nation. So this kind of effect is

just as apparent to us today as it is in some more affluent states. One thing we need to recognize is that the continued increasing expenditure for education is coming to a halt. At the same time there is a continued increase in demand by the public for education. We find ourselves in the position of having to do more to meet the demands of the public, probably in the future having less to do it with as far as money is concerned.

Do not think that I am attempting to present a bleak picture, but a picture that makes us recognize our situation. This requires thinking about things quite differently, for, basically, management in education has said that we can solve educational problems and the problems of the society through education by increasing expenditures, having more teachers, more school buildings, more instructional materials, more of everything than we now do. I think that the question of the future is not "how we get more for the enterprise?" but "how we produce more with the same amount for students?"

At this point I would like to discuss what management is. You are now managers and everything that I am going to say to you I believe you now do, but I would like to shift the emphasis of what you now do. The first thing I would say to you is there are two types of orientation for managers. One is institutional management. Another orientation is management for production. We in education have basically been institutional managers. Let me explain to you what I mean by that. Having been the manager of a small institution in education, I know how and what I thought, probably how you think. Institutional management concerns itself with maintaining the organization, with keeping it going. Therefore, its major concern is trying to make things alike. From a school superintendent's point of view, you attempt to see that School A has the same things that School B has. School A may have a student population that is predominantly college-bound; School B may have a school population that is predominantly oriented toward terminating education with the completion of high school. Yet, for some reason, we tend to say School A and School B should be alike. Let us look at an individual school as an institution. Pupil-teacher ratio: for English teachers, 25 to 1; for math teachers, 25 to 1; for typing teachers, 25 to 1. Sameness. Institutional concepts make us think about making everything the same. We have begun to deviate from that some; we have reached the point where we will give physical education teachers sixty students or we will on occasion give typing teachers forty-one. We might even have some classes in some particular subjects that are pretty small. I am over-generalizing. Too, we have begun to recognize the differences between school attendance areas, and we attempt to differentiate some. Basically we tend to say we are going to have morale problems if we show too great a difference between different functions. This is the basic concept of the single salary schedule that we fought for and have basically achieved in this state. We are involved in managing institutions, and a product orientation is quite a different kind of management; it does the same things, carries out the same functions, but has different perspectives. In this regard, the manager is concerned about effecting the greatest amount of production and assuring the greatest amount of learning. That is production in education. Institutionally, we as managers most frequently attempt to manage the teaching activity rather than the learning experience. I think this is true throughout our profession; this is not true just in local school systems, but this is true in state departments of education, and this is true in universities. It is true in the whole area of education in my opinion. We concern ourselves continually with teaching and think very little about learning.

One thing that research has shown us, if our standardized tests have any

validity at all, is that there is little or no difference between the learning resulting from one way of teaching versus that resulting from another way of teaching. A great deal of research has been done in education on various methods of teaching; we find no significant difference, and yet we continue to emphasize teaching rather than learning. I am becoming amazed by this.

We seem to organize ourselves for different kinds of teaching. We have innovations in teaching. We have basically used the same model, though, since the National Association of Secondary School Principals back in the mid-50s started a study called the Staff Utilization Studies. Out of this came a concept of modular scheduling, of different size classes, greater utilization of staff. We have not adopted much of that in this state--or anywhere in the nation, as far as that is concerned. But it is interesting to remember this was considered innovation for teaching. The basic model that we have had has been a student and a teacher. The best education occurs when the teacher gets on one end of a log and the student on the other, regardless of facilities or anything else. This is the model that we follow. We have built school buildings trying to use that same model, and I am amazed at us. We have said basically that the best way to utilize this model is to have a teacher lined up with thirty students, and that has been the traditional application of this model. As if the concept of one teacher and thirty students were the greatest thing that has ever happened! Then the staff utilization studies (I guess this started with J. Lloyd Tromp at the University of Chicago's demonstration school) came through and said we need to have just a teacher and an individual or that we have to have some great big classes and some very small ones. Then we are really going to do a good job at teaching. Dr. McGuffey is an expert in school buildings; he can assure you that a tremendous number of school buildings have been built in this nation and even in this state with this basic concept of one teacher to thirty students in mind. However, no one learns as one of a group of thirty. We learn as individuals, and the individual ought to be our model. I emphasize this. I am not going into how I think that this can be accomplished--that would be an entirely different topic--and I am not sure that I know how it can be accomplished. I do know that we are going to have to change our emphasis.

What I am going to say about management would apply to institutional management or management for production or management for learning, but I think that it is important that I mention some specific management functions to you. Management, in my opinion, is making decisions, and making decisions is probably the hardest thing that managers attempt to do, because most frequently decisions are easily put off. From my little experience in the area, I found that it is much easier and much better to go ahead and make a decision than to postpone or avoid it. We tend to delegate decisions beautifully; in the organization in which I now operate, quite frequently managers, including myself, tend to put off making decisions, and then they are made at a much lower level than they ought to be made. Let me implore you to make decisions; do not be afraid to make decisions.

Management makes decisions about four essential areas. One is selecting goals or providing directions, and those are the most important decisions that managers make, although often we spend the least amount of time with these decisions. You make these decisions now, but I would like for you to spend more time in trying to decide where we should go. Maybe it is right where we are, but let it be well known.

Second, we make decisions about plans, and by plans I mean how we are

going to get where we say we want to go, specific directions. Plans include the utilization of staff, the utilization of facilities, etc.: basically, "This is how we are going to get where we say we want to go." In my opinion, the most important decisions that you can make here are decisions about pupils--what we want them to know, what they ought to know. This is an unusual role for a school superintendent to play, is it not? I have talked about goal development in the past, and I have had people say to me, "It is just not democratic to decide what students ought to know." But I think that your major decision-making role should be that of determining what students need to know. People say to me, "We don't have any right to tell people what they need to know." In our present structure, we at the management level simply delegate this decision about this important area to the lowest level of management, because teachers are managers, too, managers of classroom situations; and goals are selected not on the comprehensive, broad perspective but by each individual teacher throughout the nation. Because of inaction on our part, the direction of what happens in education is placed at the lowest level. I personally feel that that is a sad state of affairs. Selecting goals for students is your job. It is up to you to see that decisions are made about what I prefer to call "what students need to know."

You frequently have to make decisions about the operational aspects of what you are carrying out; that is what we are prone now to make the most decisions about. This is where we tend to spend our time. It is there. It is thrust on us; we have to react to it and interact with it constantly.

I think we need to make more decisions about how well we have done what we said we were going to do. We measure very little performance; and our measurement of performance is an interesting thing in terms of teachers again. We talk about whether they are on time or not, whether they are properly dressed or not, whether they are good community members or not, etc. We talk very little about whether children learn. If we place our emphasis on performance, we are going to have to measure performance on the basis of whether students are learning or not.

Management, then, makes decisions about these four major areas. Most managers do a whole lot better at planning than at measuring. I do, and I think this is basically true of all of us.

To place this into another context, I would like to mention that measurement of performance in education is generally called evaluation. Evaluation and accountability are essentially the same thing. Both are attempting to determine how well we are doing what we are supposed to do. Accountability goes a step further and <u>reports</u> how well we are doing what we are supposed to do.

We are accountable now, but accountable for what? We consider ourselves accountable most frequently for how well the organization is running, for the morale of the faculty, for the behavior of the students, etc. We tend to make ourselves accountable for the institutional management aspects rather than for the production of learning. Again, we tend to center our attention on teaching, not learning.

I would mention that management occurs at various levels and that accountability should occur at various levels. There is one other major decision that I think you must make, and it has to do with the delegation of authority and responsibility. That is a major planning decision that must be made by top-level management. As you are aware, you are responsible totally, and you really cannot delegate responsibility because you maintain responsibility for everything that happens in your school system; but you must delegate authority to people throughout the school system in order to

accomplish what you need. You should hold these people accountable.

In education there are many levels of management, many levels of program. I would like to use vocational education as an example. Let us say that level one is your total instructional effort or learning effort. This is your job, the superintendent's job. Level two in vocational education would probably be that part of the effort that deals with vocational education, and this should be learning oriented. You are probably going to have someone responsible for that activity, according to how large your system is and how broad your system's perspective is in vocational education. Level three could possibly be your adult vocational education program. Again you are probably going to have someone responsible to you. If you do not delegate authority, there is no way that you can hold anybody accountable but yourself. If I were sitting in your shoes, I would hate to be totally accountable by myself, without being able to say, "Well, so-and-so is responsible for this, and I can hold him responsible, and then if he doesn't do that job, I can put somebody else in that position."

You may even have a school operation, like a post-secondary and adult school, with one man who can hold people accountable for the production of learning. The post-secondary program is a program basically of in-school activity during the school day, a full-time school activity; and you will probably have somebody responsible here. Then there will be the adult program with night students, people who are working and who want to raise their occupational skills. You will probably have what is known as the industrial program, too. Various kinds of activities will be taught, and, hopefully, learning is occurring in industrial settings. The point that I am trying to make here is that levels of effort to produce learning are important, because one level is going to have to do with instruction, and someone needs to be held accountable there. We call these people teachers. It is imperative that we find ways in vocational education and in education generally to manage the organization in such a way that we are not trying to deal with the organization but with the effort of the organization. We must place our emphasis on the learning effort.

Finally, let me say that management must also deal with a second factor. Maybe what I have been talking about is that in management there are essentially two areas--one is initiating structure, basically what I have been speaking of, and the second is consideration, or how you work with people. I think that I should mention this to you for one moment.

We must manage the organization in such a way that goals are accomplished, and we have to do this in light of behavior of individuals that we are dealing with. I may be overemphasizing the lack of regard for people in your organization, but I would again like to emphasize it, because here you are having to define roles--roles that individuals play so that behavior is modified and goals are met; but the individual is concerned not about roles but about personality fulfillment. The individual is saying, "I don't care about this role of teaching more kids; I'm concerned with whether I feel good about this myself." When you are dealing with the institution in initiating structure, this is a formal activity; and you are designing formal organizational structures. The individual is more concerned about the informal relationships between himself and the other teachers, the principal, the curriculum director, and the kids. You have to find a way of matching the informal structure with the formal one. You also end up with accountability here. Make these individuals accountable for their positions, for they are concerned about the rewards that are provided to them. Unless we can move into a total accountability factor, we have to decide how we can reward

people for meeting goals. This is true in any area of education, especially in vocational education, which I think is more able to move in this direction than the rest of education.

I do not envy you your position because of the various problems that you have, but I do state to you finally that accountability is something with which you and I are going to have to cope. We as managers are going to have to recognize that what we are going to be held accountable for in the future is accountability itself.

OCCUPATIONAL EDUCATION IN COBB COUNTY

Dr. Alton C. Crews

Superintendent, Cobb County Public Schools
Marietta

Of the many functions delegated to the public schools, our responsibility in the area of career education is one of the fuzziest. No consensus exists about the role of the public schools in the field of vocational or career education. There continues to be considerable controversy about what we as a public school system (grades kindergarten through twelve) ought to be doing in this field. There are many reasons for this predicament. In identifying the role of the superintendent in developing career education programs, I will allude to these reasons.

May I first be theoretical and then return to the practical part of this matter. Let me first deal with some ideas concerning education in general and occupational and career education in particular. I personally subscribe to the belief that every citizen of our country is entitled to equal educational opportunity. Equal educational opportunity is unequal if it is the same kind of education for all. Just as people differ, just as the demands of our society differ, the directions of our educational program ought to differ. Opportunity for the same kind of education for all is not equal educational opportunity for many.

Equal opportunity means the opportunity to experience the kind of education that is desired, the kind that is meaningful, and the kind that allows for success. Success is more likely if we construct educational programs related in a realistic way to the people involved than if we force people into a single pattern with the same general objectives. Too often high school completion or the receiving of a high school diploma and college entrance have been the only goals that have been accepted as truly worthwhile in the public school program. This has made it apparent to all students who do not aspire to these goals that they must pretend to aspire to them or be labeled as having less desirable or even undesirable goals. For goals and standards to be set arbitrarily and in only one educational direction seems to exemplify either an inexcusable ignorance or a kind of tyranny that is not in keeping with our basic philosophy, which states that we will try to meet the educational needs of all of our children. We seem to have been selecting people to fit programs rather than devising programs to fit people. If we discard programs that do not fit people very little is lost. On the other hand, if we discard people because they do not fit programs, then the result is tragic; and that is what we have been doing all of my life in education--we discard the people and keep the programs.

We have to make a choice in education. Are we going to make programs to fit people or try to force people into programs that do not fit them? To say that we must provide different directions in education is to imply that choices will be made. I believe that these choices ought to evolve over a period of time and that they ought to be made by the person who benefits or loses as a result of his choice. It is then our obligation to see that he is able to make a choice from the widest possible range of opportunities and that he is acquainted with the alternatives and the relationship of the op-

portunities to himself. Educational directions should develop as a result of the needs of the society in which one lives. They ought to be realistic, and they ought to be short-range as well as long-range programs. They ought to be acceptable to all and operate in a favorable climate of educational concern. This climate must be based on sincerity rather than sentimentality, if it is to stimulate growth in areas of personal choice. In this climate the quality of effort and achievement rather than the direction will determine approval and acceptance. Increased holding power (and this is something that some of you may disagree with) is not the most important justification for instituting changes in curriculum, constructing new buildings, and buying expensive equipment. It is our responsibility to provide programs and facilities which best meet the requirements of all available students.

We build programs and make changes in order to properly meet our obligations to those enrolled in our schools. In doing this we will automatically hold many who might drop out and we will attract some who have been lost to the school, but the point that I wish to make is that we will be doing what we really should be doing whether it keeps people in school or not. I am not at all certain that the American idea that everybody has to stay in school until he is eighteen or through twelve grades is at all realistic in the kind of world in which we are living today. It is my opinion that most of the same students will end up in a career or vocational program whether they are dumped into the program or whether they are helped, encouraged, guided, and allowed to choose. How he gets into that vocational program does make a tremendous difference, however, in the way that the student feels about himself. No less important is the way the teachers, the other students, the school, and the community feels about him and the program he is in. The student's concept of himself is influenced so much by the attitudes of others that he cannot feel important unless he is supported in this belief by those people who are important to him.

Everything that I want to say has to do with that one concept right there, and I want to repeat that for emphasis: most of the same students will end up in a vocational program whether they are dumped into the program or whether they are guided into the program, but there is nevertheless a great deal of difference about the way the student comes into the program. He can either be dumped or come into the program voluntraily. If the only major or prestigious goal is college preparatory, a high school diploma, then we either force the youngsters who do not want to go that way to tell us a lie and say they do want to go that way or we force them into a secondary category that has little prestige, and the self-image is deflated immediately. The heart of the presentation that I want to make is the concept that we probably will have the same people in the career and occupational programs that we have now, but we need to change the technique of getting them there from the way in which we are presently allowing them to drift into it by forfeit because they did not fit into the prestigious category.

Let me cite an example here. We recently started a vocational high school in Cobb County, and we started it as an adjunct to an existing "comprehensive" high school which is basically a college prep high school. Much to our surprise and chagrin we saw much resentment on the part of the teachers in that college preparatory school because there was a department in their high school that was called a vocational program. This illustrates an earlier contention that school people support the academic-vocational dichotomy. If a youngster is dumped into a program which those of us within the profession see as a second-rate choice, how under the sun can that youngster have any good self-image or any self-approval of himself while all around him

people working in the profession are saying this is a second-rate kind of arrangement? If it is valid to assume that it is important for us to find a way to guide youngsters into career and occupational experiences in the public schools rather than allow them to migrate there by default, then this becomes the heart and soul of the problem of dealing with career and occupational education.

A fellow with whom I worked in another school system in another state used to describe vocational education as the leaning tower of Pisa. He said what has happened in vocational education--and he could go back and cite all the efforts that had gone into the development of vocational education--has occurred at the high school level. We have had many vocational acts and many programs, but every one of them has been plastered onto an existing vehicle, the secondary program. So we have stuck on and stuck on until we actually have a kind of inverted pyramid within the schools which is standing on virtually no sound base at all. All the programs we have developed in vocational education have been sticking on at the higher level, so the whole program is in danger of toppling over because of this concept. That is why we are having conferences like this, why there is so much concern and ferment in this country today about career education, why we had the 1963 Vocational Act and the 1968 amendments. We have not yet devised a humane way of guiding youngsters into career education programs.

If this is the case, what are some ways to get this thing rightfully oriented, turn it over? This is what you are interested in as the chief school officer in your community. You have to be concerned about the role of vocational education.

A large majority of secondary school principals admit that our public finds today's public school program a rather meaningless, irrelevant maze that they are wandering through without its being related to what they see as future steps in their lives. I personally believe that this is probably the greatest single causal factor in student unrest today in the public schools of America. At the college level and the high school level, there is a lack of relevancy in what we are teaching. This is forcing us to reassess what we are trying to do.

A second factor contributing to this dilemma results because of the federal funding of vocational education. We have seen over the years the development of a dichotomy between vocational education and general education. We have seen the vocational department operate almost exclusive of local control. I can cite an instance in this state where a vocational teacher at the local school level receives instructions directly from the state, and neither the superintendent nor the principal is made aware of the instructions. I do not mean that some illicit conspiracy exists but it is a system that exists. Over the years, due to the original nature of its funding, vocational education has been a separate kind of educational function, not an integral part of general education, and we have tolerated it in the public schools. This in my opinion has produced an alienation between those at the local level teaching in vocational education and those teaching in general education. This is a second factor contributing to our need for a serious reassessment of vocational education in this country.

A third factor is the conflict between the haves and the have-nots in this country. The need for making people self-productive is greater than it has ever been in our lives. In the state of Georgia, according to current statistics, about one-third of those who start the first grade will then go on to some kind of post-high school education of a formal nature. One-third will terminate their education after high school, and one-third

will drop out before high school graduation. What do these three groups have in common? They all have to earn a living somewhere, whether it is at sixteen or eighteen or twenty-two. Even though the kind of career and occupation that they are going to choose or have chosen for them differs, they have that one thing in common; they all have to go to work and earn a living. Even if we get a guaranteed annual income, people will have to work toward some goal. This is a basic assumption. Yet, on the other hand, we have geared our educational program to make it look as though preparation for college were an end within itself. In most school systems we devote 80 per cent of our time, our monies, our energies, our philosophizing, our effort toward preparing children to go to college, when in reality only a third of those who ever started the first grade are ever going to college and only about 40 per cent of that third will ever finish college. How ludicrous it is that we continue to perpetuate this practice. The common thread that ought to run through all education ought to be occupational and career education, and yet this common thread is absent in the public school program today. It has only been an adjunct to--generally in grades eleven and twelve.

Goodlad, in his recent publication, Behind the Classroom Door, says the public school as an institution is more concerned about perpetuating the status quo than it is about self-improvement. I am afraid that I would have to agree with that, because as we look around, self-improvement is not nearly as big a motive for many people as not rocking the boat. Many of us who sometimes try to produce changes run constantly into this problem. Certainly, I can offer no ready solution to this problem because I have considerable difficulty in my own school system in bringing about change.

There are drags within a community that frequently make it difficult to make changes; and I find that the greatest detriment is the institution of education itself, that this is the one thing that holds us back.

Now let me come on to the practical part of this thing. If the assumption that I have made that one of the greatest problems we have is the fact that we have literally painted ourselves into a corner by perpetuating a very nefarious, undesirable kind of dichotomy by labeling children "college-bound" and "vocational-bound," how can we get out of this corner? Teachers in colleges, universities, and secondary schools teach a body of content, and it is most difficult to prevail upon them to relate this content to career needs. This results in a fact-filled curriculum, reminiscent of the kind of teaching experiences one is exposed to in college. Yet, two-thirds of the students so taught will never finish college.

We say that a child, by the time he finishes the six grades of elementary school, ought to be able to do two things--compute and communicate. These are the common threads running through the elementary program. My contention is that we need to add to this common learning a program that deals with knowledge about, understanding of, and appreciation for occupations and careers. The public school is expected to transmit the culture of our nation. That is a common, basic fundamental in public education in America. I contend then that another common learning for all children should be occupational and career education. It should be woven into most learning experiences that a child has.

How do you accomplish this? We want to guide people into career occupations instead of thrust them there as rejects from the college prep program. What are ways to get at this? I want to cite a project in Cobb County that weaves career education into the common learnings. In grades one through six students are exposed to occupations and the world of work with each learning experience, whether it be reading, writing, science, or social

sciences. The teacher relates the learning experience to the world of work, to occupations and careers. Is it not logical to assume that you can learn mathematics and computations just as well by dealing with a problem related to occupations and careers as you can by adding up how many toys a child has lined up on a shelf in his room? Is it not logical that reading experience can operate the same way? The program is in its second year. It started because we wanted a total concept of occupational and career education from the first grade through twelfth grade. We started with a cluster of four elementary schools, which fed one junior high school, which fed one senior high school. A total program of career occupational education was begun by first working with a select group of elementary teachers and developing learning units that could be woven into (rather than plastered on) the reading, the arithmetic, the science, and the social science programs in the elementary school. Youngsters work on the old idea of spiraling concepts. A pupil starts looking at occupations in his own family: what does my father do? He begins to look at what his job entails; and the learning units--arithmetic, communication, etc.--are built around this concept. Then he begins to look a little further; the spiral grows. He looks in the neighborhood. Who are the people around me that I see? What kind of jobs are there here? What does this postman that brings my mail do? What does the policeman who directs traffic at our school in the afternoon do? The spiral then begins to grow, and as the youngster moves from first, to second, to third grade, it enlarges to the community, then to the area, then to the state, and finally to the world. In the elementary school we take the existing educational program and weave into it learning experiences that are built around an understanding of and appreciation for work, careers, and occupations.

In the upper stages of this elementary program a youngster begins to look at himself in relation to these jobs and careers. What is it that I like to do? We have goals written in terms of performance objectives in which youngsters should be able to perform a certain skill at a certain level of proficiency in order to satisfactorily complete a unit. The goals are written by subject areas and by grade levels, and they are specific. This, then, constitutes the elementary part of the program, a program of teaching about occupations.

As a student moves to the middle school, the program takes on a different kind of approach. The idea of teaching about occupations continues, but it begins to narrow down into clusters of occupations. I understand that there are 45,000 titles in the dictionary of occupations, but these can be reduced to some half dozen major occupational areas. A major area, for instance, is the whole world of production, manufacture, making things. Another major area is the service area. At this level, you begin to have the students zero in on large clusters of occupations; and you begin to work with each individual in certain group-guidance kinds of settings. How do I relate to this in terms of my likes and dislikes? What are the skills required in this particular cluster group and what are the working conditions? As this cluster concept begins to emerge, we have the PECE program, in which youngsters have the opportunity of actually visiting a representative kind of occupation in regard to each one of these half dozen clusters. It is amazing how many kids who want to be a nurse change their minds when they get to look in the operating room for the first time. For the first time some of the girls who want to be nurses really get a realistic idea of what it is like to be a nurse. If you ask children what they want to be, most, still pretending, still clinging to the prestige of the college degree and the profession, say they are going to be doctors, lawyers, professional

people. They will tell you that, and yet deep inside they know that it is not so. They say that to you because that is what you want to hear. The institution has molded them in this fashion.

In the PECE program a youngster gets to visit the production line of a General Motors plant at Doraville, and he discovers, for the first time, that the noise level on that production line is so severe it would drive him out of his skull to work there. They begin to get some taste and feel and smell for the world of work as they explore various job settings. At this point, we are still teaching about careers; we are not teaching a skill for a career yet. We taught about occupations in elementary schools; we teach about more specific occupations in the middle schools, and we begin to narrow it down as a student moves up through the grades. In the senior high schools, the last level of the program, where it is most difficult to make changes, the program continues in narrowing down the concepts in relation to the individual and possible job opportunities. We move into the area of teaching a skill for the first time, first teaching a salable skill to those who may not be able or may not choose to go to school for twelve years. They are the first ones who ought to have a skill that they can sell, when they get out of school. It may well be that we have 10 to 15 per cent of our student population who at age sixteen go to work, and the school and the employer, the school and the business, the school and the industry, then continue that child's education in a joint operation. Rather than pursue this nebulous thing we call a diploma, why can we not give a diploma for mastery of a job skill?

There is another group that probably needs skill training, skill training to prepare them to enter the labor market upon graduation from high school. Then there is a third group which needs knowledge and some training about a career that might take four years of college beyond the high school.

This total program is being implemented against a backdrop of a very traditional program. We have a large work-study program in our community; we have an area vocational technical high school in our community where children are bussed for half a day. We have homemaking education, business education, all the traditional programs that you have. But. basically our program, like yours, is academic, college prep dominated.

Paralleling the development of the career education has been the writing of curriculum guides for our school system for grades one through grades twelve. The writers of these curriculum guides were charged with usual tasks of ordering sequential learnings, content description, suggestion of materials and methods, etc. But, they also were to develop curriculum guides that lend themselves to the four-quarter school concept. Secondly, they are being developed so that they lend themselves to the accountability concept, because they will be written in terms of the performance that a child ought to be able to exhibit whenever he completes a given learning unit.

The third assignment given the writers was to relate the guides to occupational and career development. Every learning unit from the first grade through the twelfth grade will have a key to a resource book of occupational and career learning activities. If we are teaching eighth-grade Georgia history, then there will be a footnote referring to a resource book which would have a unit dealing with occupations and careers. It becomes a common learning experience for all children, interwoven, interlocked, with the existing program by being keyed to this resource material.

We have a three-year federal grant, and our job is to develop learning resources to key it to a curriculum whereby learning about occupations and careers runs throughout the school program. It is interlocked, interwoven,

with the existing disciplines. It is an integral part, not just an add-on.

With this concept, if teachers, superintendents, administrators, and the community can be brought to accept it, when a youngster comes to the high school level and decides to go into a work-study program or into a trade and industrial education program at an area high school, he has made his choice a natural way. He has been led through a series of experiences since the first grade that make this choice dignified and logical rather than a rejection from the more prestigious college prep curriculum. We may end up with the same youngsters in career and occupational training at the high school level, but they have arrived through a process that makes them just as important as the fellow who is going to college. That is what we are trying to do. Two years from now we will tell you whether we did it or not.

A COMPREHENSIVE HIGH SCHOOL PROGRAM

Mr. R. T. Guillebeau

Principal, Cedartown High School
Cedartown

I have a very high admiration for people who stay on the firing line, especially superintendents. I know all of you will go to heaven because you have had your share of hell on this good earth, especially those of you who come from the area where you have alligators up to your elbows. Some of us have moved to north Georgia to get away from the alligators, but you have stayed there and you have tried to develop a program of education that is meaningful to students.

Before I get started I want to tell you that I am going to tell you about Cedartown High School. This may not be the answer; I do not claim that the situation we have will solve your particular problems. This is just one program that we are going to present, and I want it clearly understood that this may not be relevant to what you need to do. I do not want to be misunderstood. Remember the little boy in the classroom whose teacher was telling the class that when someone needed to go to the restroom he should hold up his hand? The little boy said, "Teacher, how does that help?" So, if you do not quite follow me, you may get the wrong impression here.

I bring you greetings from Dr. Guy Taylor, my superintendent. I am very fortunate to have a man like Dr. Taylor to work with--and I do mean with. He lets you wade out in the water and find your own way until you come up to your nose. Then, just before you drown, he picks you up and helps you on your way. He is a good man to work with, and I certainly have enjoyed my work with him.

I want to tell you a little bit about Cedartown High School in the past, how it is changing, what it will be next year, and how the programs are going to come out. I will let you know at a later date how they really work after we install them. Cedartown High School has about eleven hundred students. In the years 1969 and 1970, we had 127 dropouts. We have 386 people in the freshman class, of whom 202 graduate; that means that 49 per cent of those people who started in the ninth grade did not get through the twelfth grade. This is a tremendous dropout rate, and this is something that I had to look at when I went to Cedartown High. We decided that some changes had to be made. Cedartown High School was a traditional college preparatory high school. Forty-eight per cent of the people dropping out of high school is an awful lot of people. That means that half of the population in Cedartown has not graduated from high school. This does not give you much leadership in a community. We are lacking in this area.

This past year we moved into a new facility, our comprehensive high school. It is probably the finest facility in the state of Georgia; I have no doubt about it. It is a beautiful building, and it is very functional. We have fifty-three teachers this year, operating in this fine new school. We are operating on state allotment plus four, and these four are in the vocational program. In the school 28 per cent of those who graduate go to college. We lost 48 per cent, so 52 per cent are going to graduate; and 28 per cent of that 52 per cent are going to college. That does not leave very many

to go on to college from Cedartown High School. We set out to try to devise a program that would relate to the students that we had.

This past year we undertook to redo the complete curriculum, grades seven through twelve. We are starting in the middle instead of at the bottom. Next year we go to the bottom. We wanted to try to reach those who were already in junior high before it was too late. We wanted to try, so to speak, to reach down and get grades seven through twelve first and then next year come back and get one through six; and maybe we could still save some of those people in grades seven through twelve, rather than starting at the bottom and seeing success twelve years hence. This was our idea. I attended a meeting last year at North Georgia Technical School, and there we heard about a D & H grant and Dr. Boggs. I went back to Cedartown High School and wrote a D & H program and just happened to be lucky enough to get it funded; and, through this, we are developing our curriculum. We are developing it on a quarter basis. We are writing behavioral and performance objectives, devising tests for each department, and trying to interweave it or interlock it with vocational education; and we believe that we can do it.

The first thing that I feel a school administrator has to have in order to redo a school's program completely is a staff that is ready to change. You cannot have a stigma attached to a vocational program and an academic program. Immediately you have to have a program for a school that reaches each student, regardless of what that student wants to do. I cannot stand to hear a teacher say, "He ought to have more ambition than to be a brick mason." Brick masons are making $9.50 an hour in Atlanta right now, and that is about as much as any teacher is making, I will guarantee you. Welders? What in the world is wrong with welders?

We had a boy who dropped out of school in the ninth grade, seventeen years old; and I went to see him at his house and said, "Son, is there anything we can do for you at Cedartown High School?" He said, "No, sir, I don't believe there is. I don't like English too much, and I've read that history about as long as I care to read it." I said, "You come back and start a program that you want to start." He came back to school and said, "Will you let me stay in shop all day?" I told him that if he would come back to school we would let him stay in the shop all day if he wanted to. He returned, and he was spending six hours a day in metal fabrication. We finally talked him into going into a reading class where we could teach him to read a little bit. He learned to read somewhat better than he had been reading. When he got ready to cut the metal, he found that he needed to know a little bit about measuring, so we got him into a math class. When the school year ended, we were teaching him reading, math, and metal fabrication. He signed up to come back next year as a regular student, but he will be a vocational student. This is what these programs can do if you develop them right.

Through this D & H grant, as I said, we tried to develop a special kind of program. We started with the PECE program at the seventh-grade level, and this will be on the quarter system. Every kid that goes through the seventh grade will rotate through the PECE program; every kid in the seventh grade will get an opportunity to go out and see these operations, to get on the assembly line and what have you.

In the eighth grade we have three programs. We want four, but next year's implementation consists of three programs. We have an ag program which is going to be a new curriculum for us, a home economics program, and an industrial arts program. The curriculum for industrial arts is what we call the world of manufacturing--this is the IACP, Industrial Arts Curricu-

lum Project, the world of manufacturing program--because this teaches assembly line production here in the eighth grade.

On the ninth-grade level we have the traditional agricultural program, but it is going to be developed for our own area. There is no sense in students' studying about growing tobacco up here in Polk County; we might as well start talking about chicken and cattle farming and a little bit of cotton, and that is about as far as the ag program in Polk County needs to go. One of the finest agricultural areas in the world is the land around Tifton, so they can have a very strong ag program, but it would be meaningless in Polk County.

We are going to have a business education program based on a new curriculum being developed at the University of Georgia right now. We have our teachers down here helping to develop this new multi-occupational approach to business education. In the ninth grade we also have the world of construction in the industrial arts program--another IACP program. We feel that the manufacturing and construction programs will introduce a kid to every occupational cluster that we have after this. Every cluster that we have is touched in some way by those two programs. We also have the home economics program at the ninth grade. This again is a multi-occupational approach which will explore the world of work through home ec.

In the tenth grade we start our cluster program. Business education continues, ag continues, and we go into construction. This will be a new program started on the D & H grant--electro-mechanical cluster, metal fabrication cluster, transportation, vocational drafting. All of those clusters will be begun in the tenth grade. If we have a student who is overage that student can start in the ninth grade, and we have approval to start some older students even in the eighth grade. We are going to transport them from the junior high to senior high to get them interested or train them to do a job if they want to terminate their educations in the ninth grade. They can get out in the world of work. Whether or not we want to hold on to them is immaterial; if we can teach them to get a job whenever they want to terminate, this is the main thing. It keeps them out of the welfare lines.

As we move up this thing, we are trying to reverse this pyramid so that a pupil can come down to exactly what he wants to do. We have the senior plan which enables students to go to trade and industrial schools, secondary schools, post-secondary schools and major in whatever they really want to do. We will have this program, and we have been very successful in recruiting people for it. We have twenty-two students going from our high school to the trade and industrial school at Coosa Valley Tech next year. This is one of the highest numbers of students of any high school in the state of Georgia. We just sold the program, and this is what you have to do. If I had got three more students I would have hired one more teacher--I would have been one teacher to the good. I would have sent the students to the T & I school and let someone there teach them, but I would have got credit for them. This is about the best deal that we can get on this thing.

Quite a few vocational programs will be offered at Cedartown High School next year. There are going to be some two-hundred different courses offered at Cedartown High School and Cedartown Junior High School. Let me describe just one phase of our curriculum, our math program. We have tried to interweave or interlock the vocational education with the academic education, and the math program includes practical math, consumer math, trade math, and applied math. This sequence of courses--four years of courses--will relate directly to vocational education.

We will also have the CVAE Program. We have already established two

teams of teachers to work with the CVAE Program, to insure that the vocational programs and the academic programs interlock. One week each quarter, one week out of twelve, the vocational teacher is going to find out what each student is doing. He is going to find out that Johnny is working on the cone in his metal fabrication shop, and he is going to ask the English department to work on the presentation of the cone--how Johnny can describe it, how he can communicate the development of this cone to somebody else. The math department will tell him how to measure the different angles that he needs to measure in order to construct this cone. The science department can tell him about the composition of the metal. We will have interlocked all the academic areas at least once during the quarter with his vocational education. We feel that this is a built-in assurance we are going to succeed.

Some good materials on interlocking science, math, communication skills with the vocational programming have been developed, and we have used these guides a lot in writing performance guides for our different academic areas. We think this is one of the finest pieces of work we have seen in this area. We have two teachers down here at the University of Georgia this week going over the material and looking at improvements on this material.

INSTITUTE EVALUATION

VOCATIONAL EDUCATION AND THE SUPERINTENDENT

This instrument is intended to aid in the evaluation of the Institute for Superintendents. Please answer questions and indicate your reactions to the best of your ability. You are not asked to sign your name.

1. Indicate your position of responsibility. Check One.
   - 19 A. Superintendent
   - 4 B. Assistant Superintendent
   - 6 C. Other

2. Indicate the days on which you attended the Institute sessions.
   - 29 Monday
   - 29 Tuesday
   - 30 Wednesday

3. Living accommodations on campus were:
   - 11 Excellent
   - 11 Good
   - 1 Comfortable
   - ___ Poor
   - ___ Terrible
   - 6 N/A

4. The extent to which the central purpose of the Institute was accomplished was:
   - 13 Excellent
   - 16 Good
   - ___ Adequate
   - ___ Poor
   - ___ Failed Completely

5. In terms of value to my school program, the content of the presentations made during the Institute was:
   - 23 Extremely Relevant
   - 3 Mildly Relevant
   - 1 Not Relevant
   - 2 N/A

6. Indicate on the scale provided the extent to which you think the Institute accomplished its specific objectives. Circle one after each objective.

	Poorly	Moderately	Extensively	N/A
A. Helped me to become more knowledgeable about the need for vocational education in the public schools.		10	19	
B. Assisted in improving my understanding of the intent, nature, and structure of vocational education.		10	19	
C. Contributed to a deeper and wider acquaintanceship with new developments in vocational education.		9	20	
D. Helped me to gain more insight into the developmental nature of vocational education.		15	14	

	Poorly	Moderately	Extensively	N/A
E. Contributed to a better understanding of the components and the role of a developmental program in vocational education.		15	14	
F. Contributed to a better understanding of the major elements and processes of new directions in vocational education.		12	17	
G. Helped me to become aware of and acquainted with exemplary programs in vocational education.		11	18	
H. Helped to define more clearly my role in creating a climate for the development of vocational education in my school.		10	19	
I. Was helpful in the preparation of a plan to improve vocational education in my school system.	1	20	7	1

7. I am fully committed to change the curriculum in my school system so as to improve vocational education and the total school program.
   27 Yes 2 N/A ___ No

8. In terms of other factors the Institute was: (Circle One)

	Poor	Average	Good	Excellent
A. Planning		1	10	18
B. Organization		1	10	18
C. Management		1	13	15
D. Sequence of Presentations		2	11	16
E. Opportunities for Discussion		1	10	18

	Too Short	Satisfactory	Too Long
F. Length	1	28	

9. What should the Institute staff have done differently that would have improved it?

10. My overall rating of the Institute is: (Circle One)

Poor	Average	Good	Excellent
		10	19

11. What suggestions do you have for a follow-up of this Institute?

EVALUATION FORM

SUPERINTENDENT'S INSTITUTE

N/A - 3

	Before			After		
	None	A Little	A Lot	None	A Little	A Lot
1. Have knowledge of the need for Vocational Education.		14	12		1	25
2. Know the role of Vocational Education in total school program.	1	21	4		3	23
3. Understand the elements that make up a sequential developmental program in Vocational Education.	7	18	1		9	17
4. Understand the intent, nature, and structure of Vocational Education.	3	20	3	1	6	19
5. Am aware of the new directions in Vocational Education.	3	17	6		3	23
6. Know my role in improving Vocational Education.	3	18	5		8	18
7. Have knowledge about interlocking the curriculum.	6	18	2		10	16
8. Know types of programs that contribute to a developmental program in Vocational Education.	8	17	1		10	16